PROBLEMS AND COPING STRATEGIES IN RELATIVES OF THE CHRONICALLY MENTALLY ILL

by

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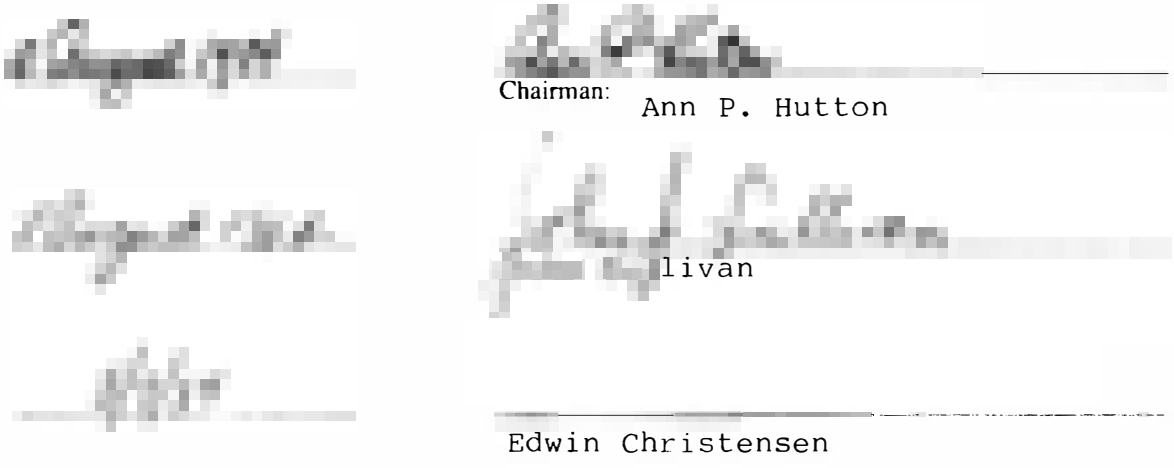

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ABSTRACT

Since the passage of the Community Mental Centers Act of 1963, a large percentage of chronically mentally ill adults are being cared for in the community and living with their families. For these individuals, families and not professional mental health workers have in many ways become the primary care takers. Despite this trend, there continues to be a paucity of systematic research on the problems encountered by relatives of the chronically mentally ill in day-to-day living. Such information is needed both to guide nursing practice and to maintain the family as a support system for the chronically mentally ill.

The objectives of the current study were to identify the perceived frequency of common problems as encountered by relatives of schizophrenics as well as the perceived amount of stress provoked by these problems. The present study also examined the types and effectiveness of coping strategies used by these subjects to manage the stresses. In order to collect information regarding stresses and coping strategies, it was necessary to develop a research tool and method that could eventually be used to gather valid and reliable data. Lazarus' (1980) model of stress

appraisal provided the theoretical framework. Frequency distributions and Pearson product-moment correlations were computed in order to describe the data.

A convenience sample was taken of 27 relatives who were taking primary responsibility for 20 schizophrenic clients who were living at home or elsewhere. The subjects were chosen from several of the units in Salt Lake County Division of Mental Health and from families associated with the Utah Alliance for the Mentally Ill. Fifty-five percent of the sample were mothers of the client, 26% were fathers, 15% were spouses, and 4% were siblings. Eighty-five percent of the subjects were members of the Utah Alliance for the Mentally Ill. Eighty-one percent were of the LDS religion.

A card sort developed in a pilot study contained those problems and coping strategies most commonly reported by relatives of schizophrenics. The problem cards were organized around the adaptive tasks for coping with chronic physical illness. Information was elicited from the subjects through this card sort.

The data revealed that the primary symptoms of the client's illness take priority over other problems encountered by relatives of schizophrenics (e.g., inactivity, aggressive behaviors, and disturbances of

sleep patterns). These were conceptualized as primary problems that initiate a series of secondary problems, such as a sense of helplessness and depression, that are a reflection of the impact the symptoms of the illness have on relatives.

In order to determine the types and effectiveness of coping strategies used by subjects, frequency distributions were computed on the subjects' ratings. Those coping strategies that suggested going outside of the family for support, for example, seeking assistance from self-help groups for relatives of the mentally ill, rated high. This would be expected since a majority of subjects belonged to such a self-help group. Several coping strategies were rated low, for example, sleeping more in response to problems, or trying to go on as if nothing had happened, which suggested that either the coping strategies presented were not used and/or were not effective when used.

Correlation coefficients were used to determine if problems and/or coping strategies occurred in clusters. Significant intercorrelations among problems, coping strategies and problems, and coping strategies indicated that problems and coping seemed to occur in clusters. This suggests that clinicians may be able to impact several problems by alleviating one problem in the network.

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CHAPTER I

INTRODUCTION AND REVIEW OF LITERATURE

Families with an adult member who is chronically mentally ill (CMI) suffer as a result of many unmet needs. Since the passage of the Community Mental Centers Act of 1963, a large percentage of CMI adults are living in the community with their families. Talbott (1980) reported that after the onset of deinstitutionalization, some 65% of the CMI returned to live with their families. As the movement progressed and more individuals were placed in nursing homes, board and care facilities, and half-way houses, this number declined. Currently, some 23% of the CMI live with their families. Talbott also indicated that no more than 25% of the CMI are followed in regular after-care programs for more than 1 to 2 years after release from state institutions. Thus, families and not professional mental health workers have become the primary caretakers for at least one fourth of the CMI who live in the community.

This trend has become increasingly more apparent with the recent cutbacks in funding for community mental health programs. While funding for treatment programs specifically targeted for the CMI remains a priority,

these monies are often distributed without giving consideration to the diverse needs of the CMI and their families.

"Chronicity" is usually determined by length of illness, need for extended hospitalization or other forms of supervised residence, and presence of a severe mental or emotional disorder that interferes with ability to function (Goldman, Gottozzi & Taube, 1981; Talbott, 1980). Often the underlying disorder that leads to chronicity is schizophrenia.

The present study was concerned with those families who have a CMI member who was diagnosed as having schizophrenia. Those with schizophrenia have a cluster of disabilities that make it difficult for them to live within society or within the context of the family. Individuals with schizophrenia may have bizarre delusions in which they think that they are being controlled or that others can read their minds. This may lead to a distrust of people. Visual and/or auditory hallucinations that are often threatening in nature may be present. In addition, schizophrenics may be aggressive, particularly towards family members (Turkat & Buzzell, 1983). The schizophrenic's level of functioning may deteriorate to a point where he/she is unable to work, interact appropriately in social situations, or take care of basic needs. Thus, the person with schizophrenia

may have marked impairment of personal hygiene and grooming. The person with schizophrenia may withdraw from the world both psychologically and physically. There may be marked peculiar behavior, for example, hoarding of food or garbage, talking to self in public, and exhibiting bizarre dress and mannerism.

Few conditions have caused families such extensive emotional and economic burdens for such long periods of time. Many of these families have learned, often through trial and error, how to manage the multiple demands placed upon them. Others have not. This may lead to chronic stress within the family and frequent relapses with exacerbation of symptoms in the CMI member. Brown, Burley, and Wing (1972) and Vaughn and Leff (1976) have shown how increased stress, called expressed emotion, within the family can be a factor in the rehospitalization of the CMI member.

The problem may be confounded by the family's inability to understand and manage the symptoms and problems associated with being schizophrenic. Frequently, mental health professionals (MHP) do not take this into consideration. Instead of working with the family, they may unintentionally blame them for the problems the CMI member is having, give them conflicting messages on how to manage difficult behaviors, or exclude them from treatment. MHP may approach families in this manner

for a variety of reasons.

One reason may be that the early literature on families of schizophrenics viewed the family as a pathological agent in producing schizophrenia (Bateson, Jackson, Haley & Weakland, 1956, 1963; Laing & Esterson, 1964; Lidz, Fleck & Cornelison, 1965; Wynne, Rycoff, Day & Hirsch, 1958). In addition, MHP often lack current information on the diverse needs of the CMI and their families. Few educational programs specifically prepare MHP to work with the special needs of this population. MHP may also be fearful of the CMI client because of past experiences with aggression in this population. Since the CMI also have high recidivism rates, professionals may feel frustrated when the CMI client repeatedly returns for treatment for the same problems.

In order to compensate for a lack of services to families of the CMI, relatives have turned to each other for support. They have joined together into advocacy and mutual support groups. These groups sponsor research on schizophrenia. They work together to foster a greater understanding of the problems that arise from this illness. They encourage the families of the CMI to help each other and themselves. Relatives of the CMI have acquired considerable expertise in coping with difficult behaviors. They have joined together to exchange this knowledge in order to make living with a CMI family

member easier (Lamb & Oliphant, 1978).

Professionals and family members have much to learn from each other. Professionals can learn from family members about the problems encountered while living with a CMI person and how they manage to cope with these problems. In turn, family members can draw on the MHP's expertise in the causes and management of the CMI. Professionals can also offer the relatives of the CMI the support and empathy that are essential ingredients for the successful management of the CMI at home.

Objectives of the Study

The major objectives of this study were: a) to identify the perceived frequency of common problems as encountered by relatives of schizophrenics; b) to identify the perceived amount of stress evoked by these problems; c) to describe how relatives cope with these identified problems; and d) to determine the perceived effectiveness of coping strategies.

Rationale

Only within the last 10 years have professionals in the field of mental health begun to study the problems of dealing with the CMI at home. A number of articles have been written on this issue; however, few studies in the literature have addressed it systematically. Of those studies that attempted to objectively describe

what it is like to live with a CMI member, Creer and Wing (1974) seem to be the most noteworthy. Creer and Wing attempted to describe the problems that relatives of the CMI face by interviewing 80 families that contained a schizophrenic member. From these interviews, they categorized specific behaviors that required intervention by relatives. These behaviors included social withdrawal that resulted in decreased contact with others, underactivity, apathy, silence, neglect of personal hygiene, and threats of violence to themselves and others. Certainly, information gathered from loosely structured interviews has been valuable in the development of more objective research; however, caution needs to be taken when applying these findings to populations other than those with the characteristics of the sample population. Based on Creer and Wing's results, programs were developed and articles written prior to replicating the study with different populations. There seemed to be such a hunger for this information that clinicians interested in working with families of schizophrenics were eager to accept these data as a framework for family intervention.

Kint (1977) surveyed 143 families in the Washington, D.C., area composed of an aging widowed mother living with an adult schizophrenic offspring. From this survey, the following list of past and present problems were

reported and ranked in order of their concern: worry about the client, finding effective treatment, disruption of family life, employment for the client, social life for the client, financial problems, client unable to care for himself/herself, client living arrangements, being tied down to care for the client, feelings of guilt, fear of the client, getting a diagnosis, getting the client into a hospital, problems with stigma of mental illness, and getting the client out of the hospital. Kint (1977) did not attempt to quantify the frequency of occurrence and degree of stressfulness of these problems as perceived by family members. Kint also summarized specific suggestions for coping: knowledge of symptoms that lie behind troublesome behaviors, relief from financial stress, and substitute care for the schizophrenic member who lives at home. This study provides some basic information that was used in the present study to further investigate the problems that relatives of the CMI have and how they deal with these problems.

Agnes Hatfield (1978; 1979) is another researcher who has written extensively on the needs of the families of the CMI. Hatfield (1978) investigated 89 family caregivers; these were family members taking primary responsibility for a mentally ill family member living at home or elsewhere. The objectives of this study

were to describe the effect that the mentally ill member had on the family, what particular stresses were felt, and how families coped with these stresses. All of the subjects for this study were members of a self-help organization of former clients and relatives. Of the sample, 85% were parents of schizophrenics with the remaining 15% being siblings, spouses, and other close relatives. The subjects were mailed a questionnaire on which they were asked to indicate which behaviors they found disturbing and estimate the degree of stress provoked by each behavior. Each respondent was also asked to describe the effects the illness had on the family. Over 50% of the respondents found the symptoms of the illness to be the most distressing; for example, violent behavior towards self or others, apparently unprovoked suspicions, episodes of hearing voices, and engaging in nonsensical talk. Also, the unpredictable nature of the illness was found to keep the family under almost continual stress. A certain percentage of the sample was also concerned with the schizophrenic member's argumentativeness, unusual eating and sleeping patterns, destructive behaviors, and abuse of alcohol and other drugs. A large group of respondents also identified the client's poor task functioning as difficult to manage; for example, poor grooming and personal care, lack of motivation, poor money management, and

refusing to take medication. The illness also caused extensive effect on the family as a unit. Specifically, it caused hardship on siblings, posed a threat to the parent's marriage, and disrupted the family's social and personal life. The emotional burden and the responsibility for the client's care usually fell on the shoulders of one person in the family. This study was unique in that it quantified the amount of perceived stress in these families. This allowed for a categorization of problems according to perceived intensity. As further research is done using an approach that quantifies data, more will be learned about the kinds of problems that these families find to be most stressful; then wide scale interventions can be directed at the problems that are most likely to be of primary importance. This study was important in providing information and guidance for the development of the present study. A drawback of Hatfield's study was the respondents' membership in a self-help group which may bias the sample towards those families who are more likely to want and be receptive to help and support outside of the family.

Plummer, Thorton, Seeman, and Littman (1981) took a different approach to the assessment of problems that families of schizophrenics have by recording the number of times a topic arose in the course of 12 consecutive

group sessions conducted by these authors. These groups ran for 6 month intervals and were characteristically made up of 8 parents, siblings, or other close relatives. These authors reported that topics relating to the symptoms, diagnosis, and relapse of schizophrenia were brought up most frequently, followed by topics concerning the causes of schizophrenia, who was vulnerable to develop schizophrenia, and genetic counseling. Issues relating to separation from the ill relative for short or long periods of time occurred next in frequency. This was followed by discussions about medication: dosage, side effects, and the client's refusal to take medication. Less frequently occurring topics pertained to the unpredictability of the illness, learning how to distinguish abnormal from normal behavior, drug abuse, and social stigma. Guilt was a key emotional issue with these group members. Even though the selection of the sample and the gathering of the data were not well controlled in this study, the information collected supports the results of other investigations of families of the CMI.

Some of the more positive coping skills utilized by families of schizophrenics were reported by Kuipers and Priestley (1979). A genuine concern and care for the schizophrenic member expressed without intrusion was the most positive coping strategy employed. This

approach helped the schizophrenics to maintain their own self-image. Other families learned how to leave the schizophrenic member alone until troublesome behaviors passed. Family members also helped the schizophrenics to maintain self-integrity by requiring that they do only those things they were capable of doing. They encouraged as high a standard as possible without pushing the person beyond that limit. Most of these families set limits on deviant behaviors. They accepted delusions and hallucinations as real for the schizophrenic member and dealt with these by reassuring the individuals of their safety. Furthermore, families who could deal with crises effectively had learned how to stay calm themselves during an emergency situation. Families with more positive coping skils also learned how to separate illness behaviors from other aspects of the personality. Lastly, these families found that assisting the individual to stay on prescribed medication helped to abate the symptoms of the illness. Kuipers and Priestley (1979) also found that these families were frequently not able to turn to the professional staff for help because of past experiences when professionals were unable or unwilling to assist them. This increased the family's sense of isolation. This report was one of the few that directly addressed the coping strategies used by families of

schizophrenics. Even though this information was not obtained in an objective and systematic manner, it offers helpful information on how these families coped with the problems they encountered. Further studies are needed to expand upon these results.

A few investigators have studied the kinds of problems encountered by families of schizophrenics and how they deal with these problems. In the past, investigators have obtained data in a nonsystematic manner. Creer and Wing (1974) obtained their information in loosely structured interviews from families that contained a schizophrenic member. Plummer, Thornton, Seeman, and Littman (1981) obtained a list of problems from families of schizophrenics by counting the number of times a topic arose in a support group for these families.

Even though there has been minimal uniformity in the collection of data and no replication of these and other studies with different populations, a picture has emerged of the types of problems encountered by families of schizophrenics. These studies have shown that the primary symptoms of the illness seem to cause the most distress to these families.

Hatfield (1978) in a more structured study of 89 family caregivers described the effect that the mentally ill family member had on the family, what particular

stresses were felt, and how families coped with these stresses. She also attempted to quantify the amount of stresses felt within the family. The information collected in this study supported the findings of other investigations of families of schizophrenics.

There have been even fewer investigations on how families cope with the problems they encounter while living with a schizophrenic member. Kuipers and Priestley (1979) described some of the more positive skills utilized by these families. Relatives who avoided over-involvement with the schizophrenic member, set realistic expectations, and dealt with crises effectively, seemed to have better outcomes.

There does need to be a further study into the kinds of problems encountered by families of schizophrenics and how they cope with these problems. In order to provide objective data and a means by which the study can be replicated, a quantitative approach to these issues would be of value. Hence the need for the present study.

A study that addresses the kinds of problems perceived by families of schizophrenics and how they cope with these problems would provide important information that is needed to guide psychosocial nursing practice. Nurses, because of their accessibility to families and also because of their philosophical orientation, are

often in positions to offer preventive, supportive, and therapeutic interventions to families of schizophrenics. In hospitals, nursing homes, day treatment facilities, and community mental health centers, psychosocial nurses are often responsible for the services rendered to this population. Psychosocial nurses who work with the CMI need to combine their skills in the nursing process to effectively influence the quality of family coping when a member is schizophrenic.

Families of schizophrenics often complain that professionals are not sensitive to their needs. They also find that much of the professional advice given to them is not very helpful, because it is not practical (Lamp & Oliphant, 1978). Professionals in the field of mental health have based their interventions upon the clinicians' perceptions of what these families need. Programs that fail to include a family approach have reported higher relapse rates among the schizophrenic family member (Brown, Birley & Wing, 1972; Vaughn & Leff, 1976).

Until recently, lack of data acquired by a systematic exploration of the problems encountered by families of schizophrenics in day-to-day living have inhibited the development of family support and educational programs. This information is needed both to guide nursing practice and to maintain the family

as a support system for the schizophrenic client. The purposes of the present study were to identify the perceived frequency of common problems as encountered by families of schizophrenics and the perceived amount of stress provoked by these problems. The present study also described how family members coped with these problems.

Literature Review

Stress in Families of Schizophrenics

The study of the families of schizophrenics is not new. The emphasis in the early literature viewed the family as a pathological agent in producing schizophrenia. Lidz et al. (1965) in their investigations of families of schizophrenics, spoke of marital "skew" and "schism" as family interaction patterns that trigger the initial breakdown of a vulnerable family member. These early studies isolated variables having to do with dysfunctional family communications, such as: "double-bind" communications (Bateson et al., 1956); "pseudo-mutuality" (Wynn et al., 1958); and "mystification" (Laing & Esterson, 1964). These faulty communication patterns have certain aspects in common: an overinvolvement with the schizophrenic family member, unrealistic expectations and unclear messages, difficulty with individuation of family members, and a

need to maintain an outward appearance of normalcy in spite of obvious maladaptive interaction patterns within the family. Even though these studies have added to the understanding of schizophrenics and their families and may be applicable to a certain subgroup of this population, they have not been very constructive in helping families cope on a day-to-day basis with the problems they encounter. Also, the methodology used to obtain the information in these studies is questionable. In the early studies, there were no control groups with which to compare these findings. Thus, there may have been biases because of the researchers' values of what were "normal" communication patterns in families. There were no longitudinal studies done to see if these communication patterns changed with the absence or presence of stress in these families.

Some of the communication patterns reported by these researchers resemble those found by later investigators (Brown et al., 1972; Vaughn & Leff, 1976), to be associated with higher relapse rates among schizophrenic family members. Recent studies have taken a more objective approach to the study of families of schizophrenics by more precisely defining the variables within the family that effect the course of the illness. The earliest of these studies were done by Brown et al. (1972) and Vaughn and Leff (1976). Data from these studies support the notion that how relatives respond to worsening symptoms in

the schizophrenic family member predicts the rate of relapse for the schizophrenic. These researchers found that schizophrenics living in families who characteristically had high levels of stress had poorer outcomes than those schizophrenics who lived in families that did not have this feature. Although regular maintenance on psychotropic medications was also found to reduce relapse rates, those clients living in high-stress families still relapsed at a higher rate than clients living in low-stress families, regardless of medication maintenance. This stress resulted in a high level of expressed emotion (EE) within the family, particularly hostility, emotional overinvolvement, and criticism that was associated with a relapse of symptoms in the schizophrenic member.

These results also suggest strategies for intervention: a) decrease the amount of contact that the schizophrenic family member has with a highly emotional relative; and b) decrease the amount of general criticism that relatives give to the schizophrenic.

The EE studies did not describe the kinds of problems that caused the families to respond with high levels of stress. However, these studies have led to the development of more objective programs for families that teach them how to live with a schizophrenic member on a daily basis while avoiding behaviors that contribute

to an exacerbation of schizophrenic symptoms.

Drawing from the works of Brown et al. (1972) and Creer and Wing (1974), Falloon, Liberman, Lillie, and Vaughn (1981) conducted an educational program for the families of schizophrenics. This program included the following components: a) education of the family and client about the process of schizophrenia and its management; b) improvement of communication skills within the families towards more positive, less critical interactions; c) improvement of the coping ability within the family; and d) encouragement of the efforts made by the client and the family to foster independent living skills of the client. These authors worked with 3 schizophrenic males, ages 30, 32, and 36, and their families for 10 weeks while the clients were hospitalized and 5 weeks after their discharges. The families and clients met together in a multifamily group. In pretreatment assessment, these authors noted that the families and clients had a variety of deficits in communication and problem solving behaviors. They tended to use a lot of general criticism, to set unrealistic goals and expectations, and to not make requests for behavioral changes in a constructive manner. They also showed limited ability to develop solutions to common day-to-day problems. From these clinical observations, the objectives for the educational program were set.

All 3 clients showed substantial improvement in their behaviors at the completion of the program. Two of the 3 parents also demonstrated a reduction in the amount of general criticism expressed towards the client. As part of an ongoing study, these preliminary results, while based on only 3 subjects, are encouraging. These researchers are making an attempt to systematically intervene in meeting the needs of schizophrenic clients and their families.

Coping with Stressful Events

A review of the literature on coping with stressful events revealed that there are several ways by which the study of coping can be approached. Coping can be conceptualized in terms of ego processes, attributions, or the natural demands made by a specific situation.

Conceptualizing coping with stressful events in terms of ego processes or defense mechanisms is concerned only with the affective response to internal or external demands. Ego defense mechanisms were first described by Freud (1937). They are responses used by the person, on an intrapsychic level, to resolve the conflict between instinctual needs and external reality. Intrapsychic coping strategies help people to modify their internal environment in order to respond to a stressful external event (Vaillant, 1971). A discussion of ego defense mechanisms does not include responses that the individual

makes to alter the external environment. Even though ego defense mechanisms are important in understanding how individuals cope, they are not all inclusive. People use a variety of coping responses, among them may be ego defense mechanisms.

Another model that attempts to explain how people cope with stressful events is Seligman's learned helplessness theory. Seligman (1975) designed numerous laboratory studies using animal subjects to help explain how people react to stressful life events. Seligman found that animals who were exposed to uncontrollable shock became passive and withdrawn; he called this state, "learned helplessness." Even when put into a situation where they did have control over outcomes, these animals who had experienced learned helplessness responded with passivity.

Using human subjects, these findings have not been consistently replicated. This led to a reformulation of the original learned helplessness theory that included a cognitive component (Abramson, Seligman & Teasdale, 1978). These authors postulated that the way in which a person responded to an uncontrollable event was dependent upon the attribution of causality assigned to it. In order to further explain learned helplessness as it occurs in humans, these authors divided the concept into three variables dependent upon the attribution

of causality allotted to the event. Attributions are characterized by the extent to which they are internal versus external, stable versus unstable, and global versus specific. They hypothesized that when a person makes attributions to internal (personal) factors (i.e., "I am incompetent"), they have lower self-esteem than those who make attributions to external factors (i.e., "His behavior was too difficult for me to handle"). They also predicted that a person who makes attributions to stable factors (i.e., "I was rejected because professionals are always unhelpful") had greater performance deficits than individuals who made attributions to unstable factors (i.e., "I was unable to get the help that I wanted at that time, because I was unable to clearly express my needs"). Lastly, they hypothesized that a person who makes attributions to global factors (i.e., "I am unable to be of help, because I am totally incompetent") will generalize the deficit further than a person who makes attributions to specific factors (i.e., "I am unhelpful only when it comes to monitoring his medication").

The principles of learned helplessness theory can be applied to relatives of schizophrenics. The theory proposes to account for a particular type of coping, namely helplessness. This is a form of learned adaptation which may account for helpless behavior under

special circumstances (i.e., noncontingency). This type of coping may be found in relatives of schizophrenics as they are confronted with stressful life events, such as living with a psychotic family member. Many of the symptoms of schizophrenia are unpredictable and beyond apparent control. Often it appears to family members that no matter what they do, things do not change. Relatives may adapt to these episodes of perceived noncontrol with helpless behavior (i.e., depression).

Learned helplessness theory does not sufficiently account for the complex behaviors involved in coping with stressful events. However, this theory in combination with Lazarus' (1980) model of stress appraisal provides a comprehensive model on which to base the present study.

Lazarus' Model of Stress Appraisal

Lazarus proposed a cognitive-phenomenological approach to stress and coping (Folkman & Lazarus, 1980). In this theory, cognitive factors are central in determining the impact of a stressful event. Folkman and Lazarus (1980) offered the following definition of coping:

> Coping is defined as the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands

> and conflicts among them. Such coping efforts serve two main functions: the management or alteration of the person-environment relationship that is the source of stress and the regulation of stressful emotions (p. 223).

First of all, the way in which an individual cognitively appraises a situation affects how that person will cope with it. This cognitive appraisal determines the emotional responses that will be elicited, the coping strategies that will be used, and the effect the person will have on the situation. The person evaluates a situation as potentially threatening dependent upon the appraisal of the event and on the availability of personal and social resources to deal with it. This helps to explain why some people view an event as challenging and others view the same situations as threatening, with the former making a more favorable appraisal of the event than the latter.

Lazarus (1980) described two types of appraisal: primary appraisal in which the person evaluates what is personally at stake; this determines the individual's psychological-emotional responses. In secondary appraisal, individuals evaluate their coping options and resources. The person looks for a fit between various coping strategies and the stressful situation. The person also looks at what personal and social resources are available in the situation. Primary and secondary appraisal are very closely interrelated.

The theory of coping proposed by Lazarus is phenomenological in that it is concerned with how the individual interprets events at a particular point in time. This viewpoint implies that the person and the environment are in a continual process of relating to one another. Therefore, an assumption of the theory is that people are not behaviorally consistent across all situations. What may be perceived as stressful at one point in time may not be so at another time.

Coping as viewed by Lazarus (1980) includes both problem solving and emotion regulation responses. The type of response used is dependent upon the situation. Folkman and Lazarus (1980) found that if a situation could be changed, an individual would use a problem solving response. If the situation could not be changed but instead, must be accepted, an individual would use an emotion regulating response. In most situations, people use both forms of coping; as they are confronted with both that which can be changed and that which cannot. There may be a predominate use of one form of coping or the other dependent upon the situation.

Lazarus (1980) offers one of the most complete theories of psychological stress and coping. It is comprehensive in terms of the range and diversity of phenomena that it covers. It provides a relatively thorough analysis of an individual's coping response.

This theory was applicable to the present study for the following reasons. The present study examined the perceived amount of stress as provoked by common problems found in families of schizophrenics. The subjects from this study made cognitive appraisals of common problems and then determined the coping strategies they generally used in response to some problems. Even though this study did not look at stress and coping over time, the methodology used is amenable to this. The present study also examined problem solving and emotion regulating coping strategies to determine if these subjects gave a particular coping response dependent upon the situation.

Adaptive Tasks

Moos and Tsu (1977) focused on how people coped with the crisis of a physical illness and with the crisis of treatment. They found that when people were confronted with crises, they cognitively appraised the situation which set forth basic adaptive tasks to which certain coping skills were then applied. They outlined seven basic adaptive tasks that are associated with a physical illness. These adaptive tasks included the following: dealing with the symptoms of the illness; managing the stress of special treatment procedures; developing and maintaining adequate relationships with caregivers; managing upsetting feelings; preserving

a satisfactory self-image and defining limits of independence; preserving relationships with family and friends; and preparing for an uncertain future.

These authors also described the coping skills generally used to deal with the seven adaptive tasks. They believed that each coping skill involved the use of both emotional and behavioral mechanisms. The following is a list of the coping skills: denying or minimizing the seriousness of the illness; seeking relevant information; requesting reassurance and emotional support; learning specific illness-related procedures; setting concrete limited goals; rehearsing alternative outcomes; and finding a general purpose or pattern of meaning in the course of events.

Even though this information is based upon data from the study of individuals with physical illnesses, it offers a framework for the study of stressful life events and coping in other situations. The adaptive tasks and coping skills seem particularly relevant to the study of how families of schizophrenics cope with this illness on a day-to-day basis. A look at the problems that these families face would further verify this assumption.

In families of schizophrenics, dealing with the symptoms of the illness is particularly important. Hatfield (1978) found the symptoms of the illness to

be most distressing to her population of relatives of schizophrenics. Plummer et al. (1981) reported that topics relating to the symptoms of the illness were brought up most frequently by families of schizophrenics participating in group therapy sessions. Brown et al. (1972) and Vaughn and Leff (1976) have shown that how the relative responds to the schizophrenic's symptoms can predict the rate of relapse for the schizophrenic. Families of schizophrenics have also joined together in order to share practical tips for the management of the symptoms of the illness (Lamb & Oliphant, 1978).

Even though management of the stresses of special treatment procedures is more vaguely defined for families of schizophrenics, it is still an important task to which these families must adapt. Monitoring medication and seeing that the schizophrenic family member follows through on appointments to the mental health center are two treatment related tasks for which these families may be responsible.

The literature reports that families of schizophrenics have not always been able to maintain adequate relationships with medical and other caregivers (Kuipers & Priestley, 1979; Lamb & Oliphant, 1978). This has resulted in the family's increased sense of isolation.

A study by Brown et al. (1972) pointed to the importance of relatives' managing upsetting feelings aroused

by the schizophrenic's disturbing behaviors. Those families with a high degree of expressed emotions, particularly hostility, emotional overinvolvement, and criticism, were associated with a relapse of symptoms in the schizophrenic member. A review of the literature revealed that being able to maintain the independence of individual family members was a major adaptive task encountered by families of schizophrenics. The parents of schizophrenics have been observed in other studies to be overprotective of and overinvolved with the schizophrenic family member (Laing & Esterson, 1964; Lidz et al., 1965; Wynne et al., 1958).

Preserving relationships with family and friends is also particularly relevant to families of schizophrenics. The success of mutual support groups for families of schizophrenics is an indicator of the importance of this task (Lamb & Oliphant, 1978). The work done by Brown et al. (1972), and Vaughn and Leff (1976) also attest to the importance of maintaining relationships within the family.

Loss of usual role function by the schizophrenic is a frequent occurrence in these families. This frequently leads to the relative's denial and failure to grieve and adapt to the loss and their subsequent setting of unrealistic goals for the schizophrenic family member (Arieti, 1979; Kuipers & Priestley, 1979).

As a result of the unpredictable nature of schizophrenia, it is necessary that these families accept and adjust to some uncertainty in their lives. Hatfield (1978) found that the unpredictable nature of the illness kept the family under almost continual stress. Topics pertaining to the unpredictability of the symptoms of schizophrenia were of concern to families participating in support groups conducted by Plummer et al. (1981).

The tasks faced by families in adapting to having a chronically mentally ill member are, thus, not unlike those of families adapting to a chronic physical illness. The Moos and Tsu (1977) list of adaptive tasks seemed a useful way of categorizing information on the problems of families of schizophrenics for the present study.

Effective Coping

Many investigators have discussed effective coping. Traditionally, coping ability was judged solely on personal characteristics that help people defend against emotional distress, that is, defense mechanisms (Freud, 1937). Researchers like Pearlin and Schooler (1978) have elaborated on this approach. They described effective coping as those responses that prevent problems from resulting in emotional stress. These responses not only include those that minimize the emotional discomfort, but also involve those that alter or eliminate the sources of stress and those that change the meaning

of the situation in order to avoid stress that might otherwise result.

According to Lazarus (1980), adaptation (to some the ultimate goal of coping) involves a process of continuous appraisal and reappraisal of the situation. Those who cope effectively adapt their responses according to the appraisal of the situation. For example, denial may be an effective response at the onset of a stressful event. It can serve the purpose of protecting the person against overwhelming feelings until other internal and external resources are mobilized. Excessive denial over a long time can be harmful to successful adaptation. How a person appraises a situation is dependent upon a number of influencing factors: background and personal characteristics of the individual, the surrounding physical and social environment, the nature of the stressor, past experience with coping, and available personal coping resources.

More specific issues have been discussed in relation to effective coping. Maintaining a sense of control particularly when outcomes appear unpredictable and beyond personal control is important (Craig, 1983). When individuals continuously fail to cope successfully with stressful events, they perceive no relationship between their actions and the outcomes of these situations. In these circumstances, individuals may experi-

ence an increase in tension. In an attempt to decrease this tension, they reappraise the situation and use other coping strategies to deal with the stress or increase the use of the ineffective coping strategies.

The preservation of hope has been noted to be an important influencing factor on effective coping (Craig, 1983). This hope can come in many forms; for example, hope for cure, successful resolution of troublesome symptoms, for more effective treatment, or for finding new meaning in life as a result of the illness experience.

The extent to which people are involved with those around them influences coping ability (Viney & Westbrook, 1982). Those people who draw from a more varied natural support system have been shown to cope more effectively (Hirsch, 1980).

Although some studies have examined effective coping, there is no universally agreed upon method to measure stress and coping (see Folkman & Lazarus, 1980, for a discussion of this issue). In both theory and method, there is controversy about how to measure coping. Most coping studies have been based on observer's ratings of subject's coping responses whereas, few studies have looked at coping as perceived by the subject. It was not the intent of the present study to measure coping by established objective measures; instead, subjects

were asked to judge the effectiveness of the coping strategies which they indicated they had used in coping with their schizophrenic family member. Such an approach needs to be examined and understood in conjunction with corresponding data from other sources.

CHAPTER II

METHOD

Design

In order to determine the kinds of problems families of schizophrenics found to be stressful and how they deal with these problems, a nonexperimental, descriptive approach was employed. There has not been sufficient research done in this area to generate specific testable hypotheses. As a result of this line of investigation, more specific research questions can be generated concerning the problems that families of schizophrenics face on a day-to-day basis and how they cope with them.

The present study also served as the basis for pilot testing a method for gathering valid and reliable information regarding stress and coping in families of schizophrenics. By using the tool on a small sample, the researcher was testing its feasibility for use with larger samples.

Setting

A convenience sample was selected from among several units of the Salt Lake County Division of Mental Health and from the Utah Alliance for the Mentally Ill (UAMI).

Salt Lake County Division of Mental Health provides a variety of mental health services to the residents of Salt Lake City and County through a number of decentralized units in the Salt Lake Valley. This researcher drew the subjects for this study from those outpatient facilities that offer a variety of services to schizophrenic clients and their families. These services include medication maintenance, vocational and social rehabilitation, individual therapy, crisis intervention, and/or family therapy.

The UAMI is an organization for the families and friends of the mentally ill of the state of Utah. As an advocacy group, the UAMI works with concerned citizens and health professionals in order to obtain better services for the CMI. They are particularly concerned with maintaining continuity of care between hospital and community, providing adequate and appropriate housing, helping families to cope with a CMI member, and finding employment opportunities for the CMI.

Sample

For the purposes of this study, a schizophrenic was operationally defined as an adult between the ages of 18 and 65 who had been diagnosed as schizophrenic according to DSM III (1980) criteria by a psychiatrist, psychosocial nurse, psychologist, or social worker.

If the client was presently living at home with

his/her parent(s), the mother and/or father of the client was interviewed. When both a mother and a father from the same household were interviewed, their data were considered separately. There were 7 conjoint family members. In the case of the schizophrenic living with a spouse, the spouse was interviewed. In the case of the schizophrenic living with an adult sibling, that person was interviewed. The sample consisted of 27 subjects who were relatives of 20 individuals diagnosed as schizophrenic.

Description of the Subjects

Background data collected on all 27 subjects included: a) age of subject; b) annual income; c) length of client's illness; d) number of times client was hospitalized; e) level of education received by the subject; f) religion; g) time since client's last hospitalization; h) client's current place of residence; i) client's current medication; j) client's age; k) whether or not client wass present during the interview; and l) UAMI member or not.

See Table 1 for a description of the subjects. Fifteen subjects (55%) were mothers of the client; 7 subjects (26%) were fathers of the client; 4 subjects (15%) were spouses; and 1 subject (4%) was the client's sister. The age of the subjects ranged from 40 to 69 years. The annual income ranged from less than $6,000 to $35,000. Nineteen of the subjects (67%) earned from

Table 1

Demographic Characteristics of the Sample

		Subject #	Total	Percentage
1.	Relationship to client:			
	Father	2,4,15,18,21,21,26	7	26%
	Mother	1,3,5,7,8,10,12,13,14, 17,20,22,24,25,27	15	55%
	Spouse	6,9,11,16	4	15%
	Other	19	1	04%
2.	Religion:			
	LDS	1,2,5,6,7,8,9,10,11, 13,14,15,16,17,18, 20,22,23,24,25,26,27	22	81%
	Protestant	3,4,12,19,21	5	19%
3.	Education - total # of years:			
	9	11,16,24	3	11%
	10	21	1	04%
	11	5	1	04%
	12	1,2,3,8,13,14,15,17, 20,25,26,27	12	43%
	13	9	1	04%
	14	4,12,18,22	4	15%
	16	6	1	04%
	17	23	1	04%
	18	7	1	04%
	Unknown	10,19	2	07%
4.	Age of Subject:			
	40-49	1,16,24	3	11%
	50-59	2,6,7,10,11,12,13,22	8	30%
	60-69	3,4,5,8,9,14,15,17,18, 19,20,21,23,25,26,27	16	59%

Table 1 (Continued)

		Subject #	Total	Percentage
5.	Yearly Income:			
	$6,000	11,19,21	3	11%
	$6,000-$9,999	5,25,26	3	11%
	$10,000-$24,999	1,2,3,4,7,8,9,10,12,13,14,15,16,20,22,23,24,27	18	67%
	$25,000-$34,999	6	1	04%
	$35,000-$49,999	17,18	2	07%
6.	Length of client's illness:			
	1-3 years	(17,18),24	2	10%
	4-6 years	5,7	2	10%
	7-9 years	(1,2),8	2	10%
	Over 9 years	(3,4),6,11,12,(14,15),16,(20,21),(22,23),(25,26),27	10	50%
	Uncertain	9,10,13,19	4	20%
7.	Conjoint family members:	1,2,3,4,14,15,17,18,20,21,22,23,25,26	7	
8.	Number of times client hospitalized:			
	1	5,10,24	3	15%
	2	(1,2)[a],8,9,12,(17,18),19	6	30%
	3	(3,4),6,13,16	4	20%
	4	(14,15)	1	05%
	5	7,(20,21),(25,26)	3	15%
	6	27	1	05%

Table 1 (Continued)

		Subject #	Total	Percentage
	25	(22,23)	1	05%
	Many times	11	1	05%
9.	Client's current residency:			
	Living with parents	(1,2),(3,4),5,8,12, 13,(14,15),(17,18), (20,21),(25,26),27	11	55%
	Living with spouse	6,9,11,16	4	20%
	Foster-home care	(22,23)	1	05%
	Group home	7	1	05%
	Other	10,19,24	3	15%

Note. [a]The numbers in parenthesis signify 1 client shared by conjoint family members that were considered as separate subjects.

$10,000 to $25,000 per year. The length of the client's illness since diagnosis ranged from 1 year to greater than 9 years, with 10 clients (50%) having been diagnosed as schizophrenic over 9 years prior to the time of data collection. Clients had been hospitalized from 1 to 25 times with 6 (30%) being hospitalized 2 times since diagnosis. The number of years of education achieved by each subject ranged from 9 years to 12 years with 12 subjects (43%) having completed 12 years of education. Twenty-two of the subjects (81%) were of the LDS religion, and 5 subjects (19%) were Protestant. Time since the client's last hospitalization ranged from less than 6 months to 10 years. Seven clients (35%) were hospitalized less than 6 months ago; 2 clients (10%) 6 months to 2 years ago; 3 clients (15%) 3 to 4 years ago; 3 clients (15%) 5 to 6 years ago; 4 clients (20%) greater than 6 years ago; and 1 client (5%) unknown. The client's place of residence was with parents (55%), with spouse (20%), in a foster home (5%), in a group home (5%), and other (15%), the latter included living with a sister (2 clients) or living alone (1 client). Forty-five percent of the clients were on parenteral fluphenazine at the time of the interview; 45% were on prescribed oral psychotropics; and 10% were on no prescribed psychotropic medications. Psychotropic medications other than parenteral fluphenazine included

oral fluphenazine, thioridazine, trifuloperazine, haloperidol, perphenazine, lithium carbonate, and trazodone. The clients' ages ranged from 21 years to 66 years. Thirteen clients were female (65%) and 7 clients were male (35%). Eighty-five percent of the subjects were members of the UAMI while 15% of the subjects were not members.

Instrument

The overall study consisted of two parts. The first part involved the development of the instrument, and the second involved the administration of the instrument to relatives of schizophrenics.

The instrument was developed by this researcher according to the following procedure. This researcher conducted an open-ended interview with 3 family members and 3 clinicians working with families of schizophrenics.

The family members were chosen according to the following procedure. An administrative member of the UAMI contacted 3 members who were currently actively involved in the care of a schizophrenic family member. All 3 family members were clients' mothers. After the initial permission was obtained from the administrative member, this researcher phoned each family member. The investigator first introduced herself and stated the purpose of the study. Then the investigator asked for the family member's permission to be interviewed.

If the family member granted permission, this researcher arranged a convenient time with the subject to be interviewed. All interviews were conducted in the subjects' homes per their requests. A consent form was signed by each subject before proceeding with the pilot interviews.

The clinicians for the initial study were approached by this researcher in person. This researcher explained the purpose of the study to the clinicians and then asked for their permission to participate.

The purpose of this pilot study was to generate a list of problems faced by families of schizophrenics and a list of coping strategies used by them. These initial family members were asked two questions in an open-ended interview: What are the problems you encounter and find to be stressful? And how do you deal with these problems? After these initial lists were obtained, this researcher gave them to the clinicians asking them to add or delete problems/coping strategies according to their experiences with families of schizophrenics. The information generated from this pilot study augmented that obtained from a review of the literature on families of schizophrenics.

From these lists and the literature review, this researcher designed a card sort that contained those problems and coping strategies most commonly reported

by families of schizophrenics. A card sort was used instead of a questionnaire, because it gave the subject the chance to consider each statement separately. Also, the subject found the card sort to be enjoyable. Many subjects likened the sorting of the cards to playing cards, a relaxing pasttime. This seemed to increase the motivation of some subjects to participate in the study. The card sort is easy to administer, and it provides the subject with the opportunity to elaborate on each card as desired. Each subject was also asked to make a cognitive appraisal of a stressful situation and choose the coping strategies they would use to manage that particular stress. Asking subjects to make these judgments was based on Lazarus' (1980) framework that it is the individuals' perceptions of the event and their coping resources that determine the eventual behavior or defensive strategy used to manage the stressful event.

The problem cards were organized using the seven adaptive tasks described by Moos and Tsu (1977) and discussed in the literature review section of this paper. The coping cards included both problem solving and emotion regulating strategies (Lazarus, 1980). Eleven coping cards were worded to suggest problem solving coping strategies, and ten were worded to suggest emotion regulating strategies. These categories were determined

by using some of Lazarus' (1980) statements verbatim and by designing statements that followed its guidelines. The contents of these statements were taken from the pilot study. There were a total of 32 problem cards and 21 coping cards. See Appendix A for the complete lists of problems and coping strategies that made up the card sort.

Procedure

The investigator requested written permission from both the Salt Lake County Division of Mental Health and from the UAMI to conduct the study.

Within the county mental health system, the subjects were obtained from referrals made by the client's primary clinician. After a list of clients diagnosed as schizophrenic was developed, this investigator had the client's primary clinician ask the client if this investigator could phone the family member(s) most involved in their care. At this time, some primary clinicians also obtained written permission from the client that granted his/her consent for the family member(s) to participate in the study. After these initial permissions were obtained, the investigator phoned the family members. The investigator first introduced herself and stated the purpose of the study. Then the investigator asked for the family member's permission to be interviewed. If the family member granted his/her

permission, the investigator arranged a convenient time with the subject to be interviewed. A consent form was signed by each subject before proceeding with the personal interviews (see Appendix B for a copy of the consent form).

When subjects from the UAMI were used, an administrative member of this organization contacted each appropriate family member to obtain his/her permission for the investigator to phone him/her. The procedure as outlined above, was then followed.

Subjects were selected according to their availability and willingness to participate in the study. There are limitations associated with choosing a sample in this manner. Those who are available and willing to participate in a research study may be more motivated than the general population of potential subjects. Thus, the types of problems found to be stressful and coping strategies used may not be characteristic of the general population of families of schizophrenics. The fact that the clients were all currently in treatment may also bias the findings of this study. For example, the community mental health centers in question may attract clients from certain ethnic, socioeconomic, or age groups. Perhaps these clients are also more motivated than the general population of schizophrenics. However, many obstacles exist in trying to identify

potential subjects without violating the informed consent criteria. Since the focus of the study was primarily the development of the card sort methodology and the description of problems and coping strategies in a selected group of families or schizophrenics, the biasing in the sample selection was considered an undesirable but an acceptable limitation of the study.

Subjects who agreed to participate were given the human subjects information and consent form and background data sheet to be completed in the presence of the investigator. The investigator then administered the card sort. Each subject participated in this task only once. Subjects were first asked to rate the frequency of occurrence of each problem from 0 to 7; with 0 being "never," 1 being "occasionally," 4 being "several times," through 7 as "very often." Subjects then rated the degree of intensity of stress attributed to each problem from 0 to 7; with 0 being "not at all stressful," 1 being "minimally stressful," 4 being "moderately stressful," through 7 as "extremely stressful." After the problem cards were sorted, subjects were asked if there were other problems encountered or found to be stressful that were not included in the card sort. Subjects then rated the coping strategies for the three most stressful problems. Again, coping strategies were rated from 0 to 7 depending on their use and helpful-

ness; with 0 being "not used," 1 being "used but not helpful," 4 being "used and moderately helpful," through 7 being "used and very helpful." After the coping cards were sorted, the subjects were asked if there were other coping strategies that they used that were not presented in the card sort. The card sort took from approximately 30 minutes to 2 hours to complete. There was some variation in the time needed to complete the card sort because some subjects wanted to elaborate on each of the cards.

CHAPTER III

RESULTS AND DISCUSSION

For data analysis, the University of Utah Computer Center's (UU/CC) Univac 1100 was used. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) frequency procedure program and the SPSS Pearson Correlation program. Correlation coefficients were reported using a two-tailed test of significance.

The major objectives of this study were: a) to identify the perceived frequency of common problems encountered by relatives of schizophrenics; b) to determine the amount of perceived stress evoked by these problems; c) to describe how these relatives coped with the identified problems; and d) to determine what coping strategies were perceived as effective. The results are presented according to the objectives.

Considering the small size of the sample and the characteristics of the subjects, generalizations with respect to stressfulness and frequency of problems and coping strategies used must be considered tentative.

When a mother and father of the same client were interviewed, their data were considered separately,

which meant that there is some redundancy in the data, since the 27 subjects represented relatives of only 20 clients. An examination of the raw data from these conjoint family members revealed that these subjects, as a whole, did not rate the problems in a similar fashion, as might be expected. There were more similarities in the coping strategies chosen but, again, not to the extent expected, since individual members of the same family may perceive and respond to the same event differently, their responses were considered as separate data.

Objective I

First, to examine the perceived frequency of common problems as encountered by relatives of schizophrenics, frequency distributions were done on the subjects' problem ratings. The means and standard deviations for the problems according to perceived frequency are listed in Table 2. These results show that four of the five most frequently encountered problems relate to the primary symptoms of the illness. Subjects regularly had to deal with the client's unusual sleeping/eating patterns, poor money management, and inactivity.

Several subjects reported that the client had their days and nights confused, sleeping all day and wandering about the house or the city all night. A mother reported being disturbed when she woke in the

Table 2

Means and Standard Deviations for Problems According to Perceived Frequency

Mean Rank	Problem #	Statement	Mean	Standard Deviation
1	3	She/he has had unusual eating patterns.	4.704	2.493
2	7	She/he has had unusual sleeping patterns.	4.037	2.519
3	28	I have had to do some things for him/her that I usually would not have done.	3.963	2.738
4	6	She/he has spent all of his/her time lying around the house.	3.667	2.660
5	2	She/he has managed money poorly.	3.481	3.030
6	30	I have been unable to plan for the future because things have been so unpredictable.	3.444	2.607
7	1	She/he has acted aggressively.	3.185	2.558
8	25	I have often felt depressed.	3.000	2.617
9	27	I have wondered if I have done the right things in managing his/her behaviors.	2.889	2.679
10	26	I have felt that no matter what I do, things will not change.	2.815	2.962
10	21	His/her demanding behaviors have taken away from the time I have had to spend with other family members.	2.815	2.512
11	29	I have not known where the money will come from to pay for his/her treatment needs.	2.667	2.557
12	4	She/he has been unable to take care of some basic needs.	2.593	2.406
13	24	There have been times when I have felt resentful because the responsibility for his/her care has fallen on my shoulders.	2.407	2.606
14	23	There have been times when I have felt guilty because I thought I may have caused his/her illness.	2.259	2.740

Table 2 (Continued)

Mean Rank	Problem #	Statement	Mean	Standard Deviation
14	32	Alternative housing has not been available when she/he has needed to be placed outside of the home.	2.259	2.581
15	14	She/he has refused to take his/her medication.	2.148	2.429
16	12	I have lacked information on the availability of appropriate community resources.	2.000	2.287
17	11	I have lacked information about his/her current condition/treatment.	1.963	2.345
17	22	I have not been able to find time for other relationships or to develop interests of my own.	1.963	2.361
18	8	She/he has refused to follow through with appointments at the mental health center.	1.926	2.183
19	9	The medication he/she has taken to control symptoms has not worked.	1.852	2.169
20	15	Because of the nature of the law, I have been unable to get him/her into an appropriate treatment facility.	1.815	2.288
21	31	Inpatient therapy has not been available when he/she has needed it.	1.630	2.221
22	5	He/she has left without letting us know where he/she was going.	1.593	1.907
23	20	I have not known how to explain his/her illness to others.	1.556	2.082
24	17	I have been unable to express my feelings/concerns to the mental health professionals involved in his/her treatment.	1.370	2.388
24	19	I have felt that I have not received enough support or reassurance from other family members.	1.370	2.060

Table 2 (Continued)

Mean Rank	Problem #	Statement	Mean	Standard Deviation
25	16	I have wanted to know more about his/her condition and have been put off by mental health professionals who seem reluctant to answer my questions.	1.296	2.233
26	13	I have not been able to leave him/her alone.	1.556	1.968
27	10	In an emergency I have not had anyone to depend on or call on.	1.111	1.847
28	18	I have been unable to ask mental health professionals for assistance when I have needed it.	1.074	1.639

middle of the night to find that her son had left without telling her where he was going. Then she would lie awake the rest of the night wondering where he might be. When the client was up all night, they frequently disturbed the sleep of other family members. As one mother reported, "I didn't mind being wakened at all hours of the night, but my husband had to go to work the next day. So this upset him."

This pattern of sleeping all day and staying awake all night may partly account for the client's inactivity during the day, a behavior that troubled many relatives. A mother talked about feeling guilty whenever her son would lie around the house all day. She felt that she should be pushing him into activities all day long. Most relatives did not know how to cope effectively with the client's inactivity.

Several subjects also reported that the client had unusual eating patterns. A husband talked of having to go to several different stores in order to meet his wife's many unusual dietary requests. The client's abnormal behaviors often became most apparent at meal times. For example, 1 client insisted upon standing during meals.

Most relatives frequently had to deal with the client's inability to properly handle money. Attempts to teach the client how to manage money properly often

failed. Several clients were given allowances that they promptly spent or gave away to someone in apparent need. Few clients showed a willingness to or understanding for budgeting money. As a solution to this problem, many relatives became the client's legal guardians and thus, handled the client's monies.

The remaining of the top five most frequently occurring problems (I have had to do some things for him/her that I usually would not have done) was not listed as a symptom of the illness but concerned a change of role responsibility in the family.

Studies dealing with the chronically physically ill indicate that family members take over some tasks that the patient was responsible for prior to the illness (Moos & Tsu, 1977). This change in role responsibility also occurs in families of the CMI. Often, these responsibilities are not shared by all family members but are assumed by one member, usually the mother. Hatfield (1978) also found that having a CMI family member placed a burden on usually one member of the family. She found that this member then responded with stress, anxiety, guilt, resentment, or depression. It is likely that family members from the present study may have frequently experienced these emotions in relation to having to do for clients things that one might normally expect adult children to do for themselves.

The results (see Table 2) also indicate that problems with Mental Health Professionals (MHP) occurred less frequently than expected (Lamb & Oliphant, 1978). Even though it has been commented upon in the literature that relatives are frequently unable to turn to MHP for help because of poor or damaged relationships with them, the present study did not find this to be the case. For example, statements 16, 17, and 18 relate to MHP. Problems encountered in dealing with MHP did not occur frequently and/or were not particularly stressful to most families (see Table 3 also). These results may reflect both sampling bias and the data collection method used. Since the investigator who administered the card sort was associated with the mental health system from which clients and subjects received assistance, they might have been hesitant to discuss their problems. If this were the case, the study could be improved by having someone not associated with the mental health system administer the card sort.

In addition, most of the clients were being seen on a regular basis by a psychiatric nurse or other professional who frequently checked on the families. This relationship was considered invaluable to most of the subjects, so they perceived their needs as being adequately met by this MHP. This positive relationship with a MHP may, in fact, have motivated the subjects'

Table 3

Means and Standard Deviations for Problems According to Perceived Stressfulness

Mean Rank	Problem #	Statement	Mean	Standard Deviation
1	1	She/he has acted aggressively.	4.444	2.873
2	7	She/he has had unusual sleeping patterns.	3.778	2.873
3	3	She/he has had unusual eating patterns.	3.593	2.043
4	30	I have been unable to plan for the future because things have been so unpredictable.	3.519	2.563
5	29	I have not known where the money will come from to pay for his/her treatment needs.	3.370	2.924
6	2	She/he has managed money poorly.	3.296	2.729
7	15	Because of the nature of the law, I have been unable to get him/her into an appropriate treatment facility.	3.222	3.130
8	4	She/he has been unable to take care of some basic needs.	3.148	2.878
8	26	I have felt that no matter what I do, things will not change.	3.148	2.713
9	21	His/her demanding behaviors have taken away from the time I have had to spend with other family members.	2.926	2.786
9	14	She/he has refused to take his/her medication.	2.926	2.973
9	6	She/he has spent all of his/her time lying around the house.	2.926	2.674
10	25	I have often felt depressed.	2.889	2.455
11	27	I have wondered if I have done the right things in managing his/her behaviors.	2.852	2.299
11	28	I have had to do some things for him/her that I usually would not have done.	2.852	2.738

Table 3 (Continued)

Mean Rank	Problem #	Statement	Mean	Standard Deviation
12	5	She/he has left without letting us know where she/he was going.	2.815	2.646
13	24	There have been times when I have felt resentful because the responsibility for his/her care has fallen on my shoulders.	2.704	2.701
14	23	There have been times when I have felt guilty because I thought I may have caused his/her illness.	2.407	2.886
14	32	Alternative housing has not been available when she/he has needed to be placed outside of the home.	2.407	2.777
15	8	She/he has refused to follow through with appointments at the mental health center.	2.333	2.587
15	11	I have lacked information about his/her current condition/treatment.	2.333	2.304
16	16	I have wanted to know more about his/her condition and have been put off by mental health professionals who seem reluctant to answer my questions.	2.185	2.602
17	12	I have lacked information on the availability of appropriate community resources.	2.148	2.413
17	31	Inpatient therapy has not been available when she/he has needed it.	2.148	2.713
18	13	I have not been able to leave him/her alone.	2.111	2.517
19	22	I have not been able to find time for other relationships or to develop interests of my own.	2.000	2.542
20	10	In an emergency I have not had anyone to depend on or call on.	1.852	2.670

Table 3 (Continued)

Mean Rank	Problem #	Statement	Mean	Standard Deviation
21	9	The medication she/he has taken to control symptoms has not worked.	1.630	2.169
22	20	I have not known how to explain his/her illness to others.	1.519	1.847
23	19	I have felt that I have not received enough support or reassurance from other family members.	1.185	1.841
24	18	I have been unable to ask mental health professionals for assistance when I have needed it.	1.111	1.867
25	17	I have been unable to express my feelings/concerns to the MHP involved in his/her treatment.	.926	1.662

willingness to participate in the study in the first place.

A characteristic of the sample might also account for the low occurrence of problems with MHP in the present study. The majority of these subjects were members of the UAMI, a support organization for relatives of the mentally ill. Through this organization most of the subjects had opportunities to express their anger towards MHP, thus allowing for some catharsis of negative feelings to occur.

Objective II

To examine the perceived stressfulness evoked by these problems, frequency distributions were calculated on the subjects' ratings. The means and standard deviations according to perceived stressfulness are listed in Table 3. The results indicate that as well as being the problems most frequently occurring, subjects were also most intensely stressed by problems related to the symptoms of the illness.

These subjects were regularly stressed by the client's aggressive behavior. A mother talked about the effects of aggression on her family. "His (the client's) anger dictates what the family will do. I am afraid to set limits on his anger, because I might make him worse or alienate him more." This was a common concern among relatives.

Aggressive behavior as a stressor had been discussed in other studies. Hatfield (1978) found that subjects from the study were troubled by aggressive behaviors that often took the form of argumentiveness, physical abuse, or damage to others' properties. In a study by Creer and Wing (1974), aggressive behavior towards self and others was listed as a problem that required intervention by relatives of schizophrenics.

Aggressive behavior was most often perceived by relatives as a personal threat. To cope with this behavior, the relatives tried to draw from many internal and external resources. Unfortunately, these were not always available. Then the stress provoked by the client's aggressive behavior mounted to unmanageable proportions. At that time, the family usually brought the client to the mental health center for evaluation or to the hospital for admission.

Many encounters with the client's aggressiveness resulted in the subjects' feelings of helplessness. It seemed to many of the subjects that no matter what they did, the client remained aggressive. They came to doubt their own abilities to deal with this problem. Family relationships were often strained with members blaming each other for provoking the aggressive acts. Thus, some relatives felt they could not go to other family members for advice and support. Some relatives

turned to other families in the same situation for support. Other relatives felt that there was nowhere to turn for help. One mother talked about her hesitancy to even call the police when a client was acting out aggressively. She stated, "The police don't want to get involved; so they answer calls like these slowly or not at all."

When the client becomes a danger to himself/herself or others, MHP often get involved. This was no relief to some relatives who had dealt with low levels of aggression from the client for possibly weeks prior to its reaching dangerous levels. Some of these relatives were turned away by a MHP because the client was not yet committable. Then the coping mechanism some relatives chose (seeking help from professionals) became a stressor (not being able to get the client into an appropriate treatment facility because of the nature of the law). This also seemed to increase the relatives' sense of isolation.

The client's unusual eating/sleeping patterns and poor money management were also rated as stressful by several subjects. Since these problems were also among the ones noted as occurring with the greatest frequency, they were discussed under Objective I.

Hatfield (1978) also found that a large percentage of subjects were somewhat to very dis-

turbed by the primary symptoms of the client's illness. A large group of respondents from Hatfield's study were disturbed by the client's eating and sleeping patterns. In addition, they reported being troubled by aggressive behaviors, or expressed concern about the client's poor task functioning (e.g., poor money management, inactivity, poor grooming and personal care, and noncompliance to medication regime).

Creer and Wing (1974) described specific behaviors that required intervention by relatives. Again, these behaviors included the primary symptoms of the illness: social withdrawal, underactivity, silence, apathy, neglect of personal hygiene, and threats of violence to themselves and others.

Caution must be taken when making comparisons across these studies. Since the problem lists have not been standardized, it is difficult to determine exactly what subjects mean by specific behaviors. Also, there is variation in the characteristics of the subjects. Finally, the data from these studies were not obtained in an objective and systematic manner.

The high ranking of problem #30 (I have been unable to plan for the future because things have been so unpredictable) is consistent with learned helplessness theory (Seligman, 1975). Outcomes that appear unpredictable and thus beyond personal control lead to stress

within the individual. Many of the subjects in the present study were continuously stressed by the unpredictability of the client's illness. As one beleaguered mother reported, "We can't even go to the movies, because we don't know if he'll (the client) burn the house down while we're gone." Another mother talked about the tension she felt when she chose to leave the house when her son was acting out. She stated, "When I left he was throwing things at the wall. I had no idea what condition my house would be in when I returned." If not resolved, such stress can result in depression and further helplessness or hopelessness.

Comparing the problems that occur frequently with problems that are considered stressful reveals some differences. This comparison suggests that a problem may occur frequently but not be as stressful as a lesser occurring problem. For example, aggressive behavior occurs at a moderate rate but when it occurs, it is rated as being highly stressful.

Combination Score

In order to obtain a score that reflected the impact of both frequency and stressfulness of problems, the frequency scores were multiplied by the stressfulness scores. This was done for each subject. This score will subsequently be referred to as the "combination score." The means and standard deviations for this

combination score are reported in Table 4. Again, problems associated with the symptoms of the illness occurred with greatest frequency and were most stressful (unusual sleeping/eating patterns, acting aggressively, poor money management, and underactivity).

The symptoms of the illness seem to take priority over the other problems encountered by relatives of schizophrenics. These can be conceptualized as primary problems in this population. As a result of the nature of the symptoms of the illness for example, aggression, they take priority over other problems, or these primary problems may generate a series of secondary problems like the domino effect. This indeed seems to be the case as the next ten most frequently occurring and stressful problems seem to reflect the impact that the symptoms of the illness have on relatives.

If the symptoms of the illness are set aside, the following scenario emerges. As a result of the unpredictability of the illness process, these relatives faced an uncertain future. Role responsibilities within the family shifted as usually one person took on added responsibilities in order to maintain family functioning but at the expense of the needs of other family members (ranked #10). The primary caretaker often felt resentful of these additional responsibilities. A sense of helplessness sometimes prevailed as the relative saw

Table 4

Means and Standard Deviations of Problems According to the Combination Score

Mean Rank	Problem #	Statement	Mean	Standard Deviation
1	7	She/he has had unusual sleeping patterns.	20.714	19.374
2	3	She/he has had unusual eating patterns.	19.741	14.984
3	1	She/he has acted aggressively.	19.333	18.599
4	2	She/he has managed money poorly.	18.259	20.045
5	6	She/he has spent all of his/her time lying around the house.	16.185	17.376
6	30	I have been unable to plan for the future because things have been so unpredictable.	16.593	18.221
7	28	I have had to do some things for him/her that I usually would not have done.	15.741	17.849
8	26	I have felt that no matter what I do, things will not change.	15.481	20.308
9	25	I have often felt depressed.	14.296	18.309
10	21	His/her demanding behaviors have taken away from the time I have had to spend with other family members.	13.741	16.867
11	29	I have not known where the money will come from to pay for his/her treatment needs.	13.704	18.151
12	4	She/he has been unable to take care of some basic needs.	13.295	16.947
13	27	I have wondered if I have done the right things in managing his/her behaviors.	12.667	14.969
14	23	There have been times when I have felt guilty because I thought I may have caused his/her illness.	12.444	18.777
15	24	There have been times when I have felt resentful because the responsibility for his/her care has fallen	12.222	16.187

Table 4 (Continued)

Mean Rank	Problem #	Statement	Mean	Standard Deviation
		on my shoulders.		
16	14	She/he has refused to take his/her medication.	11.667	16.875
17	32	Alternative housing has not been available when she/he has needed to be placed outside of the home.	11.148	18.046
18	15	Because of the nature of the law, I have been unable to get him/her into an appropriate treatment facility.	10.963	14.983
19	22	I have not been able to find time for other relationships or to develop interests of my own.	9.000	14.229
20	8	She/he has refused to follow through with appointments at the mental health center.	8.630	12.052
21	11	I have lacked information about his/her current condition/treatment.	8.519	14.224
22	12	I have lacked information on the availability of appropriate community resources.	8.407	14.558
23	31	Inpatient therapy has not been available when she/he has needed it.	7.852	13.713
24	5	She/he has left without letting us know where she/he was going.	7.593	9.427
25	16	I have wanted to know more about his/her condition and have been put off by MHP who seem reluctant to answer my questions.	7.556	15.361
26	9	The medication she/he has taken to control symptoms has not worked.	6.963	13.897
27	13	I have not been able to leave him/her alone.	6.222	11.699
28	10	In an emergency I have not had anyone to depend on or call on.	5.000	11.273

Table 4 (Continued)

Mean Rank	Problem #	Statement	Mean	Standard Deviation
29	20	I have not known how to explain his/her illness to others.	4.889	11.112
30	19	I have felt that I have not received enough support or reassurance from other family members.	4.556	8.639
31	17	I have been unable to express my feelings/concerns to the MHP involved in his/her treatment.	4.444	11.301
32	18	I have been unable to ask MHP for assistance when I have needed it.	3.296	9.754

no link between his/her actions and the outcomes of behaviors. This often led to feelings of depression. Family life was disrupted as most of the energy went into coping with the client's disruptive behaviors. The cost of treatment was an extra burden on these families. Some relatives wondered at times if they may have contributed to the development of the illness. Some questioned their ability to manage the symptoms properly. All of these thoughts could lead to feelings of guilt (ranked 13th and 14th).

Subjects listed only one other problem not included in the card sort, having to make the decision to commit the client without assistance from others. This suggests that the problem statements adequately reflected the range and categories of problems experienced by the subjects in this study.

Objectives III and IV

Finally, objectives three and four examined the types and effectiveness of coping strategies used by these subjects. Frequency distributions were computed on the subjects' ratings (see Table 5). Each coping strategy was scored according to whether or not it was used and its effectiveness.

No overall coping effectiveness score encompassing all coping strategies was obtained. This would have given a better understanding of how these subjects per-

Table 5

Means and Standard Deviations for Coping Strategies

Mean Rank	Coping Strategy #	Statement	Mean	Standard Deviation
1	7	Asked for assistance from community agencies and programs designed to help families in my situation. (PS)[a]	3.963	1.938
2	4	Made a plan of action and followed it. (PS)	3.630	2.219
3	8	Asked for information and advice from persons in other families who have faced the same or similar problems. (PS)	3.247	2.128
4	11	Tried to keep things as much as possible like they were before his/her illness. (PS)	3.049	2.175
5	2	Tried to find out as much as I could about what was bothering him/her. (PS)	3.025	2.217
6	3	Sought professional counseling. (PS)	2.901	2.652
7	6	Took things one step at a time. (PS)	2.864	1.781
8	1	Drew on past experience when I was in a similar situation. (PS)	2.642	2.164
9	12	Allowed myself to feel frustrated and angry. (ER)[b]	2.494	1.831
10	5	Asked someone I respected for advice and then followed his/her advice. (PS)	2.395	1.928
11	19	Kept my feelings to myself. (ER)	2.358	1.687
12	10	Tried to keep myself busy. (PS)	2.235	1.490
13	9	Waited to see what would happen. (PS)	1.938	1.408
14	18	Tried to tell myself that things would work out. (ER)	1.926	1.757

Table 5 (Continued)

Mean Rank	Coping Strategy #	Statement	Mean	Standard Deviation
15	13	Got away from it for awhile. (ER)	1.728	2.150
16	14	Let off steam by having an argument with a family member. (ER)	1.519	1.877
16	21	Sought encouragement and support from friends. (ER)	1.519	1.382
17	20	Made light of the situation. (ER)	1.444	1.371
18	17	Went on as if nothing happened. (ER)	1.099	1.304
19	16	Tried to make myself feel better by eating, drinking, etc. (ER)	.667	.978
20	15	Slept more than usual. (ER)	.654	1.084

Note. [a]PS = Problem solving coping strategy; [b]ER = Emotion regulating coping strategy.

ceived they were able to cope in general with the illness.

As previously observed, subjects regularly went outside of the family for support in dealing with common problems associated with having a schizophrenic family member which was not surprising, since the majority of the subjects were members of the UAMI, a support organization for the relatives of the mentally ill.

Other coping strategies in the top five were ranked higher than expected, for example, Coping Strategy #4 (Made a plan of action and followed it). Most subjects when asked for clarification, reported a vague plan of action. Instead, they reported approaching these problems on a trial and error basis. This was how most of these relatives learned to cope. Possibly they would like to have had a plan of action, but attempts to do so failed because of the nature of the stressors and the novelty of the coping strategies for which the event called. If that was the case, it would give support to programs like the one described by Falloon et al. (1981) that help families develop and apply effective plans of action.

Again, the coping strategies ranked in fourth (#11, Tried to keep things as much as possible like they were before his/her illness) and fifth (#2, Tried to find out as much as I could about what was bothering him/her)

places did not coincide with what these subjects verbally reported. In fact, several subjects talked about how these approaches did not work. Possibly, these subjects when under stress used these strategies without consideration of their effectiveness.

Also indicated in Table 5 is whether a coping strategy was problem-solving or emotion-regulating. As can be seen from these data, subjects utilized problem-solving over emotion-regulating coping strategies. It is likely that failure in problem-solving would lead to a greater need for emotion-regulating strategies, although this is not clear from the data. Overall, however, most subjects used a combination of problem-solving and emotion-regulating coping strategies. This is in accordance with the framework developed by Lazarus (1980).

A look at the results on coping strategies indicates that the means were not very high. These low means suggest that either these subjects were not using the coping strategies presented and/or they were not considered effective when used. There were other strategies suggested. For example, offering encouragement and support for the client's independence helped some relatives. The card sort did not contain a statement that suggested spiritual beliefs or activities as a coping strategy. This omission may have had significant impli-

cations for the results on coping strategies, since a majority of the subjects interviewed were active members of the LDS church.

From these results, it is difficult to ascertain whether or not subjects were coping effectively on an overall basis. Pearlin and Schooler (1978) described effective coping as those responses that prevent problems from resulting in emotional stress. Most of these subjects still felt a great deal of emotional stress in relation to problems that arose from having a schizophrenic family member. According to their verbal reports, these subjects were not coping with these problems very well. Many subjects also reported feeling helpless in being able to effectively eliminate the sources of stress.

Standard Deviations of Problems and Coping Strategies

Clinical discrimination is needed for understanding those problems and coping strategies that have high means and high standard deviations (SD), high means and low SD, and low means and low SD. Those problems with high means and high SD may occur frequently and be extremely stressful when they do occur to some relatives. Other relatives may not be at all stressed by these problems. Or possibly in some families, these problems do not occur. Those problems with high means

and low SD may occur frequently and generally be stressful to relatives. These may be the types of problems described by Hatfield (1978). Those problems with low means and low SD then, generally do not occur frequently and are not particularly stressful. In examining the means and standard deviations for problems and coping (see Tables 4 and 5), variability exists in both the problems encountered by relatives of schizophrenics and in the coping strategies they use. This variability may be dependent upon the relatives' perceptions of situations and their available personal and social resources. Clinicians working with these families should be aware of the need to do individual assessments and develop individual treatment plans. Family programs like the one described by Falloon et al. (1981) offer education and counseling dependent upon both the generic features associated with schizophrenia, and the unique circumstances in each family, an approach which the results of this study tend to support.

Other Results

In order to determine if certain problems and/or coping strategies occurred in clusters, Pearson product-moment correlation coefficients were computed on the following data: perceived frequency of problems and perceived stressfulness of problems using the combination score (problems with problems); problems (again using

the combination score) with coping strategies; and coping strategies with coping strategies. Results are reported at the .01 level of significance. The Pearson r correlations for the data are presented in Appendix D (see Tables 6, 7, 8). Significant intercorrelations suggest that problems and coping strategies do appear in clusters.

Examination of how the correlations cluster yields a more global understanding of the problems families were facing and what they said they did to cope with them. The usefulness of this approach can be seen when a family member presents with a problem; the clinician can ask about other difficulties that may be associated with the presenting problem. The clusters thus give the clinician a broader network to consider when treating schizophrenics and their families. For example, if a client presents with aggressive behavior as the primary problem, the clinician can choose to treat the aggressive behavior directly or indirectly by impacting upon another problem in the cluster. Possibly the aggressive behavior is not as amenable to treatment as some other problem in the network. By treating one problem in the network, there may be a positive effect on other problems in the network. As an example of this process of analyzing the clustering of intercorrelations, two of the top five problems as described by the combination score

will be discussed.

Unusual Sleeping Patterns

Unusual sleeping patterns were significantly correlated with several other disturbing behaviors: aggression, poor money management, neglect of basic needs, inability to be left alone, inactivity, and failure to keep scheduled appointments at the mental health center.

If a client exhibits unusual sleeping patterns for example, stays up all night, he/she may lie around the house all day. This behavior can be annoying to family members who are active during the day. Some subjects thought that the client stayed up all night intentionally. They did not accept the client's complaints of not being able to sleep. Then the client's inactivity during the day angered them more. Some saw the client as being willfully lazy.

As a result of inactivity, clients often neglected basic needs. They did not shower, wash clothes, etc., for days. This put additional stress on those family members who valued cleanliness. Some relatives spent hours trying to coax clients into taking care of basic needs.

Poor money management may be a reflection of the underlying core cognitive deficit that also results in neglect of basic needs. If such is the case, poor

money management may just be another symptom of the illness, like inactivity, aggression, and unusual sleeping patterns, that relatives found disturbing.

However, poor money management may significantly correlate with other symptoms of the illness for more specific reasons; for example, a client who was inactive during the day was usually not gainfully employed. They did not earn money and thus, had few opportunities to learn how to manage it. What money these clients had was usually obtained through allowances given by other family members or through SSI checks. Several relatives from this study had learned through trial and error that the client was unable to properly manage this money. So these relatives took on this responsibility for the client. This was an additional responsibility, unlike others, that the subjects assumed without resentment. Most subjects wanted to handle the client's money.

A client who did not sleep all night often felt like lying around the house all day. Some relatives felt uneasy leaving the client at home alone all day. Most relatives had learned that the clients needed their time structured, and lots of encouragement to get going.

As a result of unusual sleeping patterns, the client may come into contact with other family members infrequently. The client may be awake and active while other

family members are asleep. During the day when the client was around the house, other family members may be off at work. This often left the client with a lot of unstructured time on their hands. Clients often left the house without telling another family member where they were going. Some clients then did not return for several days. Some subjects were so concerned by this behavior that they gave up the time they spent in pursuit of their own interests to stay at home to supervise the client. Frequently the subjects felt resentful of this intrustion on their time.

Unusual sleeping patterns are also significantly correlated with unusual eating patterns. The client may eat in the middle of the night when the rest of the family is asleep. This disturbed several relatives who woke to find their kitchens a mess and a week's supply of food missing. Most relatives were troubled by the client's unusual dietary habits. Some saw this as a sign that the client's condition was worsening.

Because of the client's unusual sleeping patterns and possible associated inactivity during the day, the client often did not follow through with scheduled appointments at the mental health center. Those clients who did not keep scheduled appointments at the mental health center and did not take the prescribed medication often had an exacerbation of the symptoms of the illness

manifested by becoming more withdrawn and inactive, or starting to spend money foolishly, or by becoming more aggressive. All of these behaviors have the potential for disrupting family life.

When the client refused to keep scheduled appointments, this had the additional disadvantage of disrupting the relationship between the family and the MHP. Those clients who regularly made scheduled appointments built up a supportive relationship with a MHP that often extended to the family. If this relationship did not exist, family members may have no one to call upon to discuss the client's condition/treatment. Not knowing the MHP, the relative may feel put off by them when questions/concerns are not adequately addressed. Through contacts with a MHP, family members may gain access to information on relevant community resources.

Some subjects found that no matter what they did, the client's disturbing behaviors, like unusual sleeping patterns, did not change. Yet, many subjects continued to question whether they were managing these behaviors correctly. Many relatives felt that if only they were doing the right things, their son or daughter would behave appropriately again. As their attempts to help clients change some of their behaviors continued to fail, many subjects felt depressed because of the apparent hopelessness of the situation. One mother

talked about the grief she felt until she realized that she would never get back the son she knew prior to the onset of the illness. Through the grieving process, she was able to let go of the idealized image of her son and accept her son as he was now. After this, she felt less depressed. The stress level within the family decreased as she began to set more realistic expectations of her son.

Since the client's sleeping patterns were also unpredictable, it was difficult for some relatives to plan from day to day. The unpredictable nature of these symptoms contributed to the sense of hopelessness in these families.

Disturbing behaviors, like unusual sleeping patterns and its associated problems, often led family members to seek placement facilities for the client outside of the home. Such facilities were often not available.

No significant negative correlations between unusual sleeping patterns and other problems were observed.

Aggression

Aggressive behavior had 17 significant correlates (see Appendix D). According to the subjects of this study, if the client manifested aggressive behavior sometimes in the course of the illness, it became a priority problem for the family. Other disturbing behaviors were likely to be more tolerated by the family

than aggressive behavior.

Aggressive behavior was identified by some relatives as unpredictable. Relatives frequently responded to this feeling of unpredictability with hopelessness and helplessness. Some of these relatives searched unsuccessfully for a particular stressor that set off the aggressive episode. As long as they could not find this stressor, they felt out of control of the situation and vulnerable. Most relatives felt that they could not adequately protect themselves from the client's aggressive behavior. The unpredictable nature of the aggressive behavior left some relatives with a feeling of depression. As Seligman (1975) reported, if a person feels out of control of external events, that person is likely to also feel depressed.

Several subjects from the present study described the client's unusual sleeping patterns as a forewarning of an exacerbation of the symptoms of the client's illness with the appearance of aggression being the symptom that these relatives most feared. A mother expressed her concerns about her son who had been unable to sleep the last few nights. She had seen this behavior before and knew it usually culminated in his becoming violent toward others.

A change in role responsibility in these families also correlated significantly with aggressive behavior.

Many of the clients' responsibilities were assumed by a particular family member. This change in role responsibility became more pronounced as the client's condition worsened. Relatives often felt resentful of these added responsibilities. Most relatives were hesitant to express their anger directly at the client for fear of making the client's behavior worse. This anger then came out in critical remarks about the client. As Vaughn and Leff (1976) reported, clients in those families manifesting a high degree of expressed emotion (EE), particularly criticism and emotional overinvolvement, have clients who relapse at a faster rate than clients in those families with low EE. Therefore, as the client's aggressive behavior becomes more pronounced, further reorganization of family structure occurs. These changes add to the stress in the family. This increased stress seems to adversely affect the client's behavior, which results in an increased likelihood of aggressive behavior.

During the time that the family is dealing with the client's aggressive behavior, there is little time left over to focus on other relationships in the family. Typically, other children were ignored until the client's condition stabilized. Some subjects were angry at the client for seemingly taking this time away from siblings. Also, during those times when the client was not doing

well, some subjects had little time left over to pursue their own interests. Again, this added to some subjects' feelings of resentment and depression.

According to existing commitment laws, aggressive behavior alone is not sufficient cause to bring persons into treatment against their wishes. The person must be of danger to self or others. Thus, inpatient treatment is often unavailable to those families who are frightened by the aggressive behavior but have no proof of danger to self or others. As a result of past experiences with the client, some subjects knew that aggressive behavior would culminate in the client's being of danger usually to others. This again, is not sufficient evidence on which to commit a person to treatment. While great emphasis should be placed on teaching families how to prevent and cope with aggressive behavior, the absence of suitable placement alternatives is a source of considerable stress for relatives of schizophrenic clients.

Those clients who did get into treatment often put an added financial responsibility on their families. Many relatives felt they did not have the financial resources to deal with the client's treatment needs.

Aggression was described by some subjects as one of several irresponsible behaviors shown by the client. Some clients neglected their grooming, lived in total

disarray, and managed their time and resources poorly. For example, one mother talked about her son who had recently given his money and personal belongings to a stranger. This created an added financial burden on this family, and made the mother angry. Attempts in the past to help her son budget his money had failed. This mother was unwilling to cut off financial assistance to her son, because she felt guilty letting him go without things, but she still resented his irresponsible behaviors. When she confronted her son with this, he became angry and threatened to do her physical harm. Her own fear kept her from confronting her son too often about many of his disturbing behaviors.

When a client was aggressive, and inpatient treatment was not available, the subject was left to deal with this disturbing behavior at home. At that time, many subjects questioned whether they were doing the right things in managing this behavior correctly. The message that many of these subjects received when the client was denied inpatient treatment was that they should be able to manage this behavior at home. This was a time when many subjects from this study turned to the UAMI for assistance. The subject brought questions about how to manage problem behaviors to this group. The subject then received feedback and possibly some practical advice. The subject was also encouraged

to ventilate feelings. Those subjects who did not belong to the UAMI and did not have an adequate relationship with a MHP were left alone in managing problems with the client. These subjects were possibly more disturbed by the client's behaviors and their own apparent inability to control these behaviors than subjects who had a support group.

The client's aggressive behavior often disrupted the family's relationships with friends and neighbors. It was frequently the most difficult behavior to explain to others. Aggressive behavior can be frightening, and most people do not know how to or want to deal with it. Many family members described being embarrassed by the client's behaviors, particularly aggression.

Some subjects also reported that so often when they needed someone to assist with an aggressive family member, no one would come. This possibly reflected the fear that MHP's may have of violent home situations and the police's hesitancy to get involved in volatile family arguments.

If the client was not taking medication as prescribed, or for some other reason the medication was not working properly, there was often a relapse of symptoms with aggressive behavior being one of the symptoms. Again, some family members tried to get the client to take the medication as prescribed. Many clients became angrier at this suggestion.

Intercorrelations of Problems and Coping Strategies

An examination of the intercorrelations among problems and coping strategies helps to determine the kinds of coping strategies that relatives of schizophrenics used to deal with specific problems. How these subjects coped with the client's unusual sleeping patterns and aggressive behaviors will be described. Only those correlations at the .01 level of significance will be discussed.

Unusual sleeping patterns. As already discussed, most relatives found the client's unusual sleeping patterns to be disturbing. A client who slept all day and paced the floor all night disrupted family life. Relatives may deal with the tension that resulted from the client's unusual sleeping patterns by arguing with other family members. This arguing, instead of relieving tension, often created some of its own. Arguing with family members was used in response to several problem areas. Arguments resulted not so much in response to primary problems, for example, the client's aggressive behaviors, as to secondary problems, for example, not receiving enough support from other family members.

As Vaughn and Leff (1976) have shown, increased stress in families of schizophrenics who have a high amount of expressed emotion (EE), particularly in the form of criticism and emotional overinvolvement, may

have clients who relapse at higher rates than those families with low EE. This study focused primarily on the relationship between a particular family member and the client. Organizational theories, like the one described by Haley (1980), show how interactions between other family members influence the client's behavior. According to this theory, the tension may be relieved between the arguing family members but at the expense of the clients who may increase their eccentric behaviors in order to maintain an existing organizational structure within the family.

Relatives may also deal with the client's unusual sleeping patterns by confiding in friends. If relatives cannot turn to other family members because of tension there as reflected in arguments, they go outside of the family, to friends, for support.

The client's unusual sleeping patterns seem to stimulate emotion regulating coping strategies. According to Folkman and Lazarus (1980), emotion focused coping strategies include those items that "describe cognitive and behavioral efforts directed at reducing or managing emotional distress" (p. 224). Folkman and Lazarus (1980) also found that problems occurring in the family context did not have a clear impact on problem-solving or emotion-regulating coping strategies. They attributed this finding to the diversity of problems in family

life. In the present case, a specific problem (the client's unusual sleeping pattenrs) is being discussed. This may partly account for the consistent use of emotion-regulating coping strategies in response to this problem. The use of emotion-regulating coping strategies also reflects the stress that results from the client's unusual sleeping patterns. Relatives need to manage their emotional distress before applying problem-solving strategies.

Folkman and Lazarus (1980) generally found that problem-solving coping strategies were used in those situations that were cognitively appraised as having the potential to be solved. Emotion-regulating strategies were then used in chronic situations that appeared to have no solution. As was seen in the intercorrelations between problems, subjects from this study may feel that no matter what they do about this problem, things would not change. In this case, it may be appropriate for the subject to use emotion-regulating coping strategies.

Aggression. The client's aggressive behavior had seven positive significant correlates (see Appendix D).

The client's aggressive behaviors had no clear cut impact on either problem-solving or emotion-regulating coping strategies. This problem may be so diverse that it required several types of coping strategies for its management. The client's aggressive behaviors

were of major concern for most of these subjects. Many subjects perceived it as potentially personally harmful. Therefore, most subjects relied upon many internal and external resources to deal with this behavior.

The relative may get away from the situation once the client begins to show aggressive behaviors. A mother reported leaving the apartment whenever her son became verbally abusive and threatening of physical abuse. After she was out of the stressful situation for awhile, she was able to think more clearly. This also gave her son some time to cool off.

The tension that resulted when the client acted aggressively, was relieved by some subjects through arguments with other family members. A woman talked about the arguments she had with her husband about their son's aggressive behavior. Occasionally, they would blame one another for making their son act aggressively, or this woman would insist that her husband do something to change their son's behavior. The husband did not know what to do; so these arguments left him feeling more angry and helpless. As can be seen, these arguments often made matters worse. They often resulted in increased isolation between family members and increased aggression from the client.

Professionals were frequently consulted about the client's aggressive behaviors. Most relatives contacted

a MHP to see if the client could be admitted to a hospital. If not, the subject usually received advice on how to handle the aggressive behaviors at home. Most relatives followed this advice. Then the relative waited to see what would happen. If the client's behavior got worse, the relative again sought professional counseling. What usually happened was the client's behavior worsened until someone outside of the family had to get involved, that is, police or a MHP. Then the client was hospitalized or, in some cases, incarcerated. That time between the initial contact with a MHP and the client's hospitalization or incarceration was a stressful time for families. They generally received little support from professionals at this time. This was a time that friends frequently offered support.

Relatives often sought encouragement and support from friends at other times. For example, the relative may get away from the client's aggressiveness by going to a friend's house. In some cases, this friend was a person who had faced the same or a similar problem in his/her family.

Some relatives, in order to deal with the aggressive behavior, kept busy. This seemed to keep their minds occupied as they waited to see what would happen.

Intercorrelations of Coping Strategies

A look at the intercorrelations among coping strategies gives a broader understanding of how relatives coped. Since 85% of the sample population were members of the UAMI, it is useful to describe a networking of coping strategies that directly relate to them. For this reason, the coping strategy #5 (Asked for assistance from community agencies and programs designed to help families in my situation) will be discussed. Only those intercorrelations that are significant at the .01 level are discussed.

Use of community agencies. This coping strategy had seven positive significant correlations (see Appendix D). Most of these subjects regularly used community agencies and programs designed to help families in their situation. Eighty-five percent of the subjects from this study were members of the UAMI. Whenever these relatives had a problem with the client, they drew from their past experiences with this self-help group and called upon them again.

Developing plans of action and then following them, waiting to see what would happen, and taking things one step at a time, were coping strategies often suggested by the community agencies/programs designed to help families of schizophrenics. Some relatives talked about these coping strategies as useful approaches to

problems that often did not have discernible outcomes. Other families who had faced the same or similar problems as the subjects of this study often made similar suggestions.

Community agencies/programs like the UAMI were also places where relatives went to let out their feelings. Many of these relatives had angry feelings towards the clients for their disturbing behaviors and towards MHP for not helping them as they wanted to be helped. They not only let out their feelings, but often did something constructive to help alleviate problems; for example, serving as an advocate for the development of alternative housing for clients.

The intercorrelation of problem #2 (Tried to find out as much as I could about what was bothering him/her) and use of community agencies was puzzling. Possibly the statement was too long, and the subjects considered only its first part. The statement then could be interpreted as meaning, "I tried to find out as much as I could about the client's illness and treatment." Providing information about mental illness and its treatment is a purpose of most community agencies/programs that are designed to help families of the mentally ill. Some of these statements may have been too long and the subjects may not have considered their full meaning. Shorter statements on the cards may reduce the like-

lihood of misinterpretation in future studies which use this methodology.

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

Summary

Over the past two decades, there has been an increased interest in relatives of the CMI. This interest began after the 1963 passage of the Community Mental Health Centers Act. After this legislation went into effect, many CMI persons who had been hospitalized for years were released, some to the care of their families. In spite of the fact that some 23% of these deinstitutionalized clients went to live with families, there has been a paucity of information on what kinds of problems these families are having and how they are dealing with these problems.

Often the underlying disorder that leads to chronicity is schizophrenia. The present study was concerned with those families who have a member who was diagnosed as having schizophrenia.

The objectives of the present study were as follows: a) to identify the perceived frequency of common problems as encountered by relatives of schizophrenics; b) to identify the perceived amount of stress evoked by these problems; c) to describe how relatives cope with these

problems; and d) to determine the perceived effectiveness of coping strategies.

A study of this type is important for several reasons. There is a paucity of information that has been obtained in an objective and systematic manner on what it is like to live with a schizophrenic family member. This information is needed in order to guide psychosocial nurses and other mental health specialists in their work with relatives of schizophrenics and to maintain the family as a support system for the schizophrenic member. Also, there is an absence of theoretically valid measures to assess families of schizophrenics. The present study had, as a secondary focus the development of a research tool and methodology that, with refinement, can be used for gathering valid and reliable information regarding stresses and coping in families of schizophrenics.

There were 27 subjects in the convenience sample: 15 mothers of the client, 7 fathers, 4 spouses, and 1 sister. When a mother and father of the same client were interviewed, their data were considered separately. There were a total of 20 clients and 7 conjoint family members. The subjects' ages ranged from 40-69 years. Eighty-one percent of the sample was LDS. Eighty-five percent of the sample belonged to the UAMI, a support group for relatives of the mentally ill for Salt Lake

City and County, Utah. Age of the clients ranged from 21 years to 66 years. The client's place of residence was with parents (63%), with spouse (15%), in foster home (7%), in a group home (4%), and other (11%). The latter included living with a sister (2 clients) or living alone (1 client).

Subjects from the study were obtained from various units of the Salt Lake County Division of Mental Health and from the UAMI. Subjects were chosen according to their availability and willingness to participate in the study.

The overall study consisted of two parts. The first part involved the development of the instrument. The second part involved the administration of the instrument to the sample population.

The instrument was developed by interviewing 3 relatives of schizophrenics and 3 clinicians working with schizophrenics and their families. From these interviews, a list of problems faced by relatives and a list of coping strategies used by them were developed. From these lists and the literature review, the investigator designed a card sort that contained those problems most commonly reported by relatives of schizophrenics and coping strategies used by this population to manage the problems. Some of the coping strategies used in the card sort were specific to relatives of schizo-

phrenics while others pertained to the general population. The problem cards were organized around the seven adaptive tasks described by Moos and Tsu (1977) for coping with chronic physical illness.

This investigator then administered the card sort to the sample population. Each subject participated in the card sort only once.

The summary of the study's results are presented in the order of the objectives. Additional results based on analyses of intercorrelations among the problems and coping strategies are also summarized.

The first objective was to examine the perceived frequency of common problems. The results showed that four of the five most frequently encountered problems related to primary symptoms of the illness. Hatfield (1978) also found that the relatives from the study regularly had to deal with the primary symptoms of the client's illness.

The other problem among the top five most frequently occurring problems was not listed as a symptom of the illness, but concerned a change in role responsibility in the family. Moos and Tsu (1977) indicated that with a chronically physically ill client, family members take over some tasks that the client was responsible for prior to the illness. These results suggest that this happens in families of schizophrenics also.

Problems with MHP occurred less frequently than expected. Even though it has been commented upon in the literature that relatives are frequently unable to turn to MHP for help because of poor or damaged relationships with them, the present study did not find this to be the case. This result may be a drawback of the methodology used in the study. Since the researcher who administered the card sort was associated with the mental health system from which these subjects received assistance, they might have been hesitant to discuss their problems.

The purpose of objective two was to examine the perceived stressfulness evoked by problems. Again, the subjects were most stressed by problems related to the primary symptoms of the illness. Studies by Hatfield (1978) and Creer and Wing (1974) support these results.

These results also suggest that relatives of schizophrenics are stressed by the unpredictability of the client's illness. This is consistent with learned helplessness theory that postulates the following: outcomes that appear unpredictable and thus beyong personal control lead to stress within the individual (Seligman, 1975). This stress, if not resolved, can result in depression. Hatfield (1978) also found that the subjects were in a state of constant tension because of

the unpredictability of the client's illness.

Comparing problems that occur frequently with problems that were considered stressful revealed some differences. This comparison suggested that a problem may occur frequently but not be as stressful as a lesser occurring problem. For example, aggressive behavior occurred at a moderate rate but was found to be extremely stressful.

In order to obtain a score that reflected the impact of both frequency and stressfulness, the frequency scores were multipled by the stress scores. This was done for each subject. This score was referred to as the "combination score."

Again, problems associated with the symptoms of the illness occurred most frequently and were found by these relatives to be most stressful. The symptoms of the illness seem to take priority over the other problems encountered by relatives of schizophrenics. These can be conceptualized as primary problems in this population. The dramatic and compelling nature of the symptoms makes them a focal point of attention.

The next ten most frequently occurring and stressful problems seem to reflect the impact that the symptoms of the illness have on relatives. These can be conceptualized as secondary problems in this population.

The purposes of objectives three and four were

to examine the types and effectiveness of coping strategies used by the subjects. These results were also classified according to whether subjects used problem-solving or emotion-regulating coping strategies.

The results indicated that relatives turn to others in a time of need, which was not unexpected since the majority of the subjects belonged to the UAMI.

While turning to others seemed to be a logical strategy for the subjects, it was also noted that these subjects regularly made a plan of action and followed it, kept things like they were before the onset of the client's illness, and tried to find out what was bothering the client. These results were not consistent with the subjects' verbal reports. There might be several explanations for this discrepancy. Possibly the subject would like to have had a plan of action but attempts to do so failed because of the stressful nature of the circumstances, or perhaps these subjects used these strategies when under stress without consideration of their effectiveness.

The results indicate that relatives from this study used more problem-solving over emotion-regulating coping strategies. A look at the raw data, however, indicates that subjects used a combination of coping strategies which is in accordance with the observations of Folkman and Lazarus (1980). Subjects may have used emotion-

regulating strategies when they could not problem solve, perhaps because of not enough information, or when problem solving failed.

It is difficult to ascertain from these results whether or not subjects were coping effectively on an overall basis. Pearlin and Schooler (1978) described effective coping as those responses that prevent problems from resulting in emotional stress. Most of these subjects still felt a great deal of emotional stress in relation to problems that arose from having a schizophrenic family member. According to their verbal reports, subjects were not coping with the illness-related problems very well. Many subjects also reported feeling helpless in being able to effectively eliminate the sources of stress which may have been a reflection of whether or not the subject had reached a point of adapting to the chronic nature of schizophrenia and grieving the loss of the client's ever achieving normalcy.

In order to determine if certain problems and/or coping strategies occurred in clusters, Pearson product-moment correlation coefficients were computed on the following data: perceived frequency of problems and perceived stressfulness of problems using the combination score (problems with problems), problems with coping strategies, and coping strategies with coping

strategies. By looking at how these intercorrelations clustered, a more global description of what these families were facing was possible.

First, from these correlations it is clear that problems and coping strategies do appear in clusters. A look at the size of the network of significant intercorrelations gives a better understanding of the impact of problems and the diversity of coping strategies used in response to a particular problem, and gives a clinically useful way for assessing family needs. If a family member presents with a problem, the clinician can ask about other difficulties that may be associated with the presenting problem. The clusters also give the clinician a broader network to consider when treating schizophrenics and their families. The clinician can choose to treat the presenting problem directly or indirectly by impacting upon other problems in the cluster. Possibly the presenting problem is not as amenable to treatment as some other problem in the network. By treating one problem in the network, there may be a positive effect on other problems in the network.

These results also indicate that individuals may use different coping strategies under different situations. Also, different individuals may use different coping strategies for the same situation. Since serial

or longitudinal observations were not studied, it is unknown if individuals respond consistently across situations.

A general look at all of the correlations between problems and coping strategies gives an idea of the amount of stress felt in these families. The problems encountered seem to cause a great deal of stress in these families that may manifest itself in arguments among family members.

The present study also had, as a secondary focus, the development of a research tool and methodology for gathering valid and reliable information regarding stress and coping in relatives of schizophrenics. The investigator found the card sort to be a useful way for gathering valuable information regarding the perceived stresses and coping strategies of relatives of schizophrenics. Further standardization of the problem and coping lists is needed; however, the card sort was useful in that it gave the subject the chance to appraise each statement separately and make a decision based upon this perception. Most subjects found the card sort to be a comfortable way to relate information about their experiences; this seemed to increase their motivation to participate in the study. The card sort is easy to administer, and it provides the subject with the opportunity to elaborate on each statement as desired. The

card sort is also amenable to making serial observations on the same subject over time.

In order to standardize the card sort, a larger pilot study needs to be done on a random sample of relatives of schizophrenics. This would minimize the danger of excluding items that are important to this population in general. Factor analysis of the initial list of problems and coping strategies would serve to eliminate repetitious statements and to determine what the underlying dimensions of problems and coping strategies might be. The final statements would then make up the card sort, which could then be administered to a larger population of randomly selected subjects.

Limitations of the Study

This research study had several limitations. As a result of the unrepresentive nature of the sample, it is difficult to generalize the findings of this study beyond the research group. Also, an N of 27 is too small to control for confounding variables, for example, age, sex, length of illness, etc. As a result of biasing in the sample selection, the subjects may have been more motivated to deal with problems. Eighty-five percent of the sample were members of the UAMI, a support group for families of the mentally ill. They were already receiving support which may have influenced the types of problems they were having and how they

were coping with these problems. Eighty-one percent of the sample were LDS. As a result, the sample was not representative of the general population of relatives of schizophrenics.

An additional limitation had to do with the procedure. Having a MHP administer the card sort may have influenced the results. For example, some subjects may have been hesitant to admit to problems with MHP since the investigator was a representative of this class of professionals. A large percentage of these subjects were dependent upon their relationship with a MHP for support and guidance. They may have been concerned that their criticisms would, in some way, disrupt this relationship.

Administering the card sort to 2 members from the same family was also a limitation; as a consequence, the results reflect some redundancy in the data.

Another aspect of the procedure introduces a possible limitation. Subjects were encouraged to elaborate upon their experiences which may have biased the results. Such anecdotes add to our understanding and richness of the descriptive data; however, this would be secondary to gathering more standardized data in further studies.

A final limitation had to do with the instrument. The card sort was not standardized. It probably con-

tained statements that were repetitious. Some of the statements may have been too long. These limitations would certainly influence the validity and reliability of the results. The card sort was also too lengthy. Subject fatigue near the end of the procedure may have biased responses.

Implications for Nursing

Psychosocial nurses are actively involved in the treatment of the CMI and their families. A large percentage of the subjects from the present study indicated that a psychosocial nurse played an important role in helping them to manage difficult situations. A psychosocial nurse was often the primary MHP for the CMI client. Within the Salt Lake County Division of Mental Health system, psychosocial nurses were involved in medication maintenance, counseling, activity therapy, outreach, inpatient treatment and liaison, and crisis intervention.

Psychosocial nurses are becoming involved in developing and conducting support groups for families of the CMI, both in the hospital and in the community. As psychosocial nurses gain experience and expertise in working with families of the CMI, they can provide valuable consultation to these families. Many psychosocial nurses, because of their experiences of working with CMI clients on a 24 hour basis in the hospital,

have encountered and dealt with many of the same problems that families find stressful. These families want to know the specifics on how to deal with disturbing client behaviors. The information from the present study provides guidance for clinical intervention with families of the CMI. It also increases understanding of what families have to cope with on a day-to-day basis.

Model of Nursing Intervention

A model of nursing intervention that applies specifically to families of schizophrenics can be developed from the results of the present study as outlined in Figure 1. The components of the model are as follows.

Primary or secondary problem: The present study indicates that there may be primary and secondary problems in families of schizophrenics. The primary problems are generally the symptoms of the client's illness. These seem to take priority over the other problems encountered by relatives of schizophrenics. Secondary problems seem to reflect the impact that the symptoms of the illness have on these relatives. Secondary problems may pertain to more global family issues.

Primary appraisal of problem(s): During primary appraisal, the relative evaluates what is personally at stake (Folkman & Lazarus, 1980).

Secondary appraisal of problem(s): In secondary

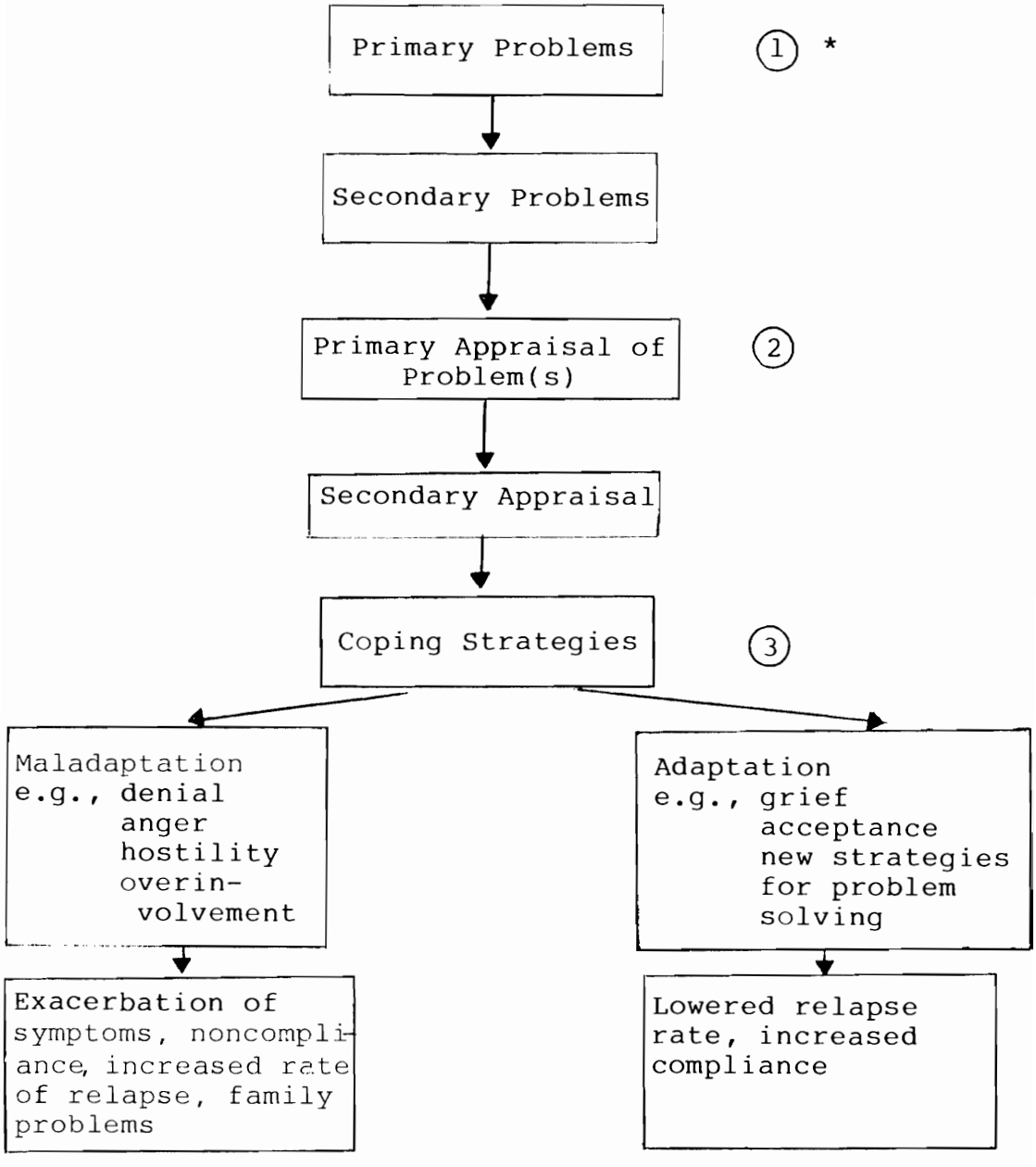

Figure 1. Nursing model for families of schizophrenics. *The numbers indicate levels of clinical intervention.

appraisal, relatives evaluate their coping options and resources (Folkman & Lazarus, 1980).

Coping strategies: These are responses that modify the problem, redefine the situation, or prevent the problem from resulting in emotional stress (Falloon et al., 1981; Pearlin & Schooler, 1978).

Adaptation: In families of schizophrenics, this may be indicated by a decrease in the level of stress within the family with a resultant decline in the client's relapse rate. There would be a decrease in the level of expressed emotion within the family, particularly hostility, emotional overinvolvement, and criticism (Brown et al., 1972; Vaughn & Leff, 1976). With adaptation, there may be adecrease in both primary and secondary problems.

Maladaptation: With maladaptation or failure in coping in families of schizophrenics, there would be high levels of stress and poorer outcomes for the client. This stress would result in a high level of expressed emotion within the family, overinvolvement, and an increase in both primary and secondary problems.

The numbers in Figure 1 indicate levels for clinical intervention: a) the clinician can impact directly on the problem. The clusters described in the present study help broaden the clinician's scope for intervention. The clinician can choose to treat the pre-

senting problem directly or indirectly by impacting upon other problems in the cluster. Possibly the presenting problem is not as amenable to treatment as some other problem in the network. By treating one problem in the network (e.g., sleep patterns), there may be a positive effect on other problems in the network. b) The clinician can provide information about the process of schizophrenia to alter the relative's perception of the problem. c) The clinician can assist the relative to learn and use effective coping strategies. Decreasing the amount of contact that the schizophrenic family member has with a highly emotional relative, learning problem-solving skills, improving communication patterns within the families towards more positive, less critical interactions, and encouraging independent living skills of the client seem to contribute to effective coping (Falloon et al., 1981).

Recommendations

It is recommended that in future studies, a larger random sample be used. It will then be possible to control for the differential effects of variables such as type of treatment, client's place of residency, length of illness, age, sex, kinship connection (e.g., parent, spouse, sibling), religion, and other demographic variables which are known to influence the ways in which people perceive and cope with stressful events.

It is suggested that a person not associated with the mental health profession administer the card sort. The subjects then may feel freer to express their views.

As previously mentioned, further research is needed in order to standardize the card sort. It needs to be revised since it contains statements that are repetitious, and to decrease the amount of time it takes to administer the tool. As utilized in this study, subjects were not discouraged from elaborating on their responses with the investigator. This additional information helped to clarify areas of confusion in interpreting the results, though in terms of objective research, the richness of the clinical anecdotes would need to give way to more objective data gathering methods. It should be noted that the investigator in no way attempted to influence how the subjects sorted their cards.

In further studies, it is recommended that the perceptions of problems and coping strategies by different family members be examined. For example, the primary care provider may have a different perception of problems than other family members. A perceptual discrepancy between parents may increase stress within the family. For example, there may be discrepancies in stress appraisal between the primary care taker and other family members. These issues need further examination.

It is also suggested that this population be studied over time. This would provide valuable information on how problems change with time and familiarity of the relative with the client's illness. It would also provide information on how coping strategies change over time and with adaptation to and acceptance of the illness.

The results from this study have clinical implications. Effort should be made to maintain the family as a support system for the CMI individual. This can be done by providing information on chronic mental illness and coping strategies to relatives. If the relative can understand the symptoms of the illness, they might be better able to effectively deal with them. Relatives also need information on available community resources and how to use them. Groups like the UAMI provide a valuable service to relatives of the mentally ill. Financial support for self-help groups like this needs to be cultivated. Relatives of the CMI also need help in developing and implementing plans of action to deal with specific problems. They need a therapeutic relationship with MHP's who are willing to be flexible in their approach.

Relatives of the CMI also need help during the time between onset of a crisis and its resolution. This support is particularly important if the client

is displaying aggressive behavior and does not meet commitment requirements.

Respite care would also be of value to these relatives. A common complaint of these relatives was that they could not get away from troublesome behaviors. Respite care would provide these relatives with a temporary release from some problems encountered by having a CMI family member. This break may help the relatives reorganize their personal and social resources. These available resources are a valuable determinant of how an individual will cope with stress.

In summary, this study provided information which can be used to begin the process of explicating the specific needs of relatives of schizophrenics and of developing a nursing model for intervening to support and educate family members. Psychosocial nurses need to include the family perspective in their work with the CMI. It is important to develop baseline data from which nursing intervention strategies can be tested.

APPENDIX A

PROBLEMS AND COPING STRATEGIES

I. Dealing with the Symptoms of the Illness

1. He/she has acted aggressively.
2. He/she has managed money poorly.
3. He/she has had unusual eating patterns.
4. He/she has been unble to take care of some basic needs.
5. He/she has left without letting us know where he/she was going.
6. He/she has spent all of his/her time lying around the house.
7. He/she has had unusual sleeping patterns.

II. Managing the Stress of Special Treatment Procedures

8. He/she has refused to follow through with appointments at the mental health center.
9. The medication he/she has taken to control symptoms has not worked.
10. In an emergency, I have not had anyone to depend on or call on.
11. I have lacked information about his/her current condition/treatment (may have included general knowledge of the illness, medication, etc.).
12. I have lacked information on the availability of appropriate community resources.
13. I have not been able to leave him/her alone.
14. He/she has refused to take his/her medication.
15. Because of the nature of the law, I have been unable to get him/her into an appropriate treatment facility.

III. Developing and Maintaining Adequate Relationships with Care Givers

16. I have wanted to know more about his/her condition and have been put off by mental health professionals who seem reluctant to answer my questions.
17. I have been unable to express my feelings/ concerns to the mental health professionals involved in his/her treatment.
18. I have been unable to ask mental health professionals for assistance when I have needed it.

IV. Preserving Relationships with Family and Friends

19. I have felt that I have not received enough support or reassurance from other family members.

20. I have not known how to explain his/her illness to others.
21. His/her demanding behaviors have taken away from the time I have had to spend with other family members.
22. I have not been able to find time for other relationships or to develop interests of my own.

V. Managing Upsetting Feelings

23. There have been times when I have felt guilty because I thought I may have caused his/her illness.
24. There have been times when I have felt resentful because the responsibility for his/her care has fallen on my shoulders.
25. I have often felt depressed.

VI. Preserving a Satisfactory Self-Image and Defining Limits of Independence

26. I have felt that no matter what I do, things will not change.
27. I have wondered if I have done the right things in managing his/her behaviors.
28. I have had to do some things for him/her that I usually would not have done (for example, wash his/her clothes, pay bills, etc.).

VII. Preparing for an Uncertain Future

29. I have not known where the money will come from to pay for his/her treatment needs.
30. I have been unable to plan for the future because things have been so unpredictable.
31. Inpatient therapy has not been available when he/she has needed it.
32. Alternative housing has not been available when he/she has needed to be placed outside of the home.

Abbreviated Statements for Problems

1. Aggression.
2. Managed money poorly.
3. Unusual eating patterns.
4. Neglects basic needs.
5. Left without telling someone.
6. Inactivity.
7. Unusual sleeping patterns.
8. Refuses appointments.
9. Medication does not work.
10. Emergency.
11. Lack information on current condition.
12. Lack information on community resources.
13. Cannot leave him/her alone.
14. Refuses medication.
15. Unable to commit.
16. Put off by MHP.
17. Unable to express concerns to MHP.
18. Unable to ask MHP for assistance.
19. Not enough support from family.
20. Do not know how to explain illness.
21. Demanding behaviors.
22. Unable to pursue own interests.
23. Felt guilty.
24. Felt resentful.
25. Felt depressed.
26. Lack of control.
27. Managing behaviors correctly.
28. Change in role responsibility.
29. Lack of financial resources.
30. Unable to plan for unpredictable future.
31. Inpatient treatment not available.
32. Alternative housing not available.

Coping

Problem Solving

1. Drew on past experience when I was in a similar situation.
2. Tried to find out as much as I could about what was bothering him/her.
3. Sought professional counseling.
4. Made a plan of action and followed it.
5. Asked someone I respected for advice and then followed his/her advice.
6. Took things one step at a time.
7. Asked for assistance from community agencies and programs designed to help families in my situation.
8. Asked for information and advice from persons in other families who have faced the same or similar problems.
9. Waited to see what would happen.
10. Tried to keep myself busy.
11. Tried to keep things as much as possible like they were before his/her illness.

Emotion Regulating

12. Allowed myself to feel frustrated and angry; let my feelings out somehow.
13. Got away from it for a while.
14. Let off steam by having an argument with a family member.
15. Slept more than usual.
16. Tried to make myself feel better by eating, drinking, smoking, taking medication, etc.
17. Went on as if nothing happened.
18. Tried to tell myself that things would work out.
19. Kept my feelings to myself.
20. Made light out of the situation; refused to get too serious about it.
21. Sought encouragement and support from friends.

Abbreviated Statements for Coping Strategies

1. Drew on past experience.
2. Tried to learn more.
3. Professional counseling.
4. Plan of action.
5. Asked for advice.
6. One step at a time.
7. Use community agencies.
8. Other families.
9. Waited.
10. Kept myself busy.
11. Kept things like before.
12. Let my feelings out.
13. Got away.
14. Argued with family member.
15. Slept.
16. Make myself feel better.
17. Ignored the problem.
18. Things would work out.
19. Kept my feelings in.
20. Made light of situation.
21. Help from friends.

APPENDIX B

CONSENT FORM

You are being asked to participate in a research study. Your participation is voluntary. The following information should be read before you agree to involve yourself in this study.

Purpose of the study: This study is designed to examine what problems families of schizophrenics encounter on a day-to-day basis, how they deal with these problems, and whether they think their approach to problems is helpful. The information obtained from this study will assist mental health specialists to better meet the needs of families of schizophrenics.

You will be asked to volunteer about 30 minutes of your time. During this time you will be asked to sort a set of cards that have statements on them concerning problems that families of schizophrenics encounter and how they deal with these problems. Further instructions will be given by the researcher.

Voluntariness: Your participation in this study is completely voluntary. You may drop out of the study at any time. If you decide not to participate or drop out after starting, services from the mental health system will NOT be affected in any way. The mental health system will not be informed one way or the other about your participation.

Confidentiality: Information in this study will be identified by number only.

Feedback: If desired, participants may receive feedback after the information has been collected and analyzed.

Verbal/written permission of the client was obtained prior to contacting their parent or spouse.

Thank you for your participation.

Consent: I have read the above and my questions have been answered. I desire to participate in this study.

Signature _____

Date _____

APPENDIX C

DATA COLLECTION FORM

Code #_____

1. Your relationship to client:
   ____ Father
   ____ Mother
   ____ Spouse
   ____ Other _____

2. Your age: _____ Client's age: _____

3. What is the approximate total income received by your household each year?

   ____ less than $6,000
   ____ $6,000 - $9,999
   ____ $10,000 - $24,999
   ____ $25,000 - $34,999
   ____ $35,000 - $49,999
   ____ $50,000 and up

4. Length of client's illness:
   ____ 1-3 years
   ____ 4-6 years
   ____ 7-9 years
   ____ Over 9 years
   ____ Uncertain

5. How many times has client been hospitalized? _____
   When was his/her last hospitalization? _____

6. Client's current residency:
   ____ Living with parents
   ____ LIving with spouse
   ____ Foster-home care
   ____ Group home
   ____ Hospital
   ____ Other _____

7. Is client currently on psychotropic medication?
   _____

APPENDIX D

INTERCORRELATIONS OF DATA

Table 6

Intercorrelation of Problems with Problems Using the Combination Score

Problem # and Statement	Positive Correlation # and Statement	r*	p
1. Aggression	30 Unable to plan for unpredictable future.	.6253	.000
	7 Unusual sleeping patterns.	.6205	.000
	28 Change in role responsibility.	.6119	.000
	15 Unable to commit.	.6105	.000
	21 Demanding behaviors.	.6048	.000
	31 Inpatient treatment not available.	.5658	.001
	24 Felt resentful.	.5625	.001
	25 Felt depressed.	.5409	.002
	2 Managed money poorly.	.5381	.002
	10 Emergency.	.5241	.003
	20 Do not know how to explain illness.	.5168	.003
	29 Lack of financial resources.	.4961	.004
	27 Managing behaviors correctly.	.4859	.005
	22 Unable to pursue own interests.	.4854	.005
	4 Neglects basic needs.	.4613	.008
	26 Lack of control	.4537	.009
	9 Medication does not work.	.4454	.010
2. Managed money poorly.	4 Neglects basic needs.	.6745	.000
	6 Inactivity.	.6214	.000
	30 Unable to plan	.6021	.000

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	for unpredictable future.		
	7 Unusual sleeping patterns.	.5565	.001
	1 Aggression.	.5381	.002
	14 Refuses medication.	.4968	.004
	28 Change in role responsibility.	.4776	.006
	8 Refuses appointments.	.4706	.007
3. Unusual eating patterns.	7 Unusual sleeping patterns.	.5542	.001
	24 Felt resentful.	.4790	.006
	4 Neglects basic needs.	.4785	.006
4. Neglects basic needs.	6 Inactivity.	.7192	.000
	2 Managed money poorly.	.6745	.000
	7 Unusual sleeping patterns.	.6698	.000
	30 Unable to plan for unpredictable future.	.6538	.000
	21 Demanding behaviors.	.6333	.000
	8 Refuses appointments.	.5404	.002
	28 Change in role responsibility.	.5306	.002
	22 Unable to pursue own interests.	.5295	.002
	3 Unusual eating patterns.	.4785	.006
	19 Not enough support from family.	.4690	.007

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	1 Aggression.	.4613	.008
	24 Felt resentful.	.4419	.010
5. Left without telling someone.	30 Unable to plan for unpredictable future.	.5950	.001
	31 Inpatient treatment not available.	.5624	.001
	26 Lack of control.	.5315	.002
	7 Unusual sleeping patterns.	.5250	.002
	25 Felt depressed.	.4522	.009
6. Inactivity	7 Unusual sleeping patterns.	.7347	.000
	4 neglects basic needs.	.7192	.000
	2 Managed money poorly.	.6214	.000
	14 Refuses medication.	.4981	.004
	13 Cannot leave him/her alone.	.4866	.005
	8 Refuses appointments.	.4845	.005
7. Unusual sleeping patterns.	6 Inactivity.	.7347	.000
	4 Neglects basic needs.	.6698	.000
	1 Aggression.	.6205	.000
	11 Lack information on current condition.	.5885	.001
	2 Managed money poorly.	.5565	.001

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	3 Unusual eating patterns.	.5542	.001
	8 Refuses appointments.	.5535	.001
	30 Unable to plan for unpredictable future.	.5409	.002
	14 Refuses medication.	.5349	.002
	12 Lack information on community resources.	.5337	.002
	5 Left without telling someone.	.5250	.002
	21 Demanding behaviors.	.5134	.003
	27 Managing behaviors correctly.	.4962	.004
	24 Felt resentful.	.4909	.005
	31 Inpatient treatment not available.	.4841	.005
	25 Felt depressed.	.4814	.006
	16 Put off by MHP.	.4796	.006
	22 Unable to pursue own interests.	.4720	.006
	26 Lack of control.	.4684	.007
8. Refuses appointments.	15 Unable to commit.	.6474	.000
	14 Refuses medication.	.6471	.000
	16 Put off by MHP.	.6670	.000
	13 Cannot leave him/her alone.	.5675	.001
	28 Change in role responsibility.	.5615	.001
	7 Unusual sleeping patterns.	.5535	.001
	22 Unable to pursue own interests.	.5468	.002
	4 Neglects basic needs	.5404	.002

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	11 Lack information on current condition.	.5322	.002
	30 Unable to plan for unpredictable future.	.4976	.004
	31 Inpatient treatment not available.	.4940	.004
	6 Inactivity.	.4845	.005
	2 Managed money poorly.	.4706	.007
9. Medication does not work.	20 Do not know how to explain illness.	.7409	.000
	10 Emergency.	.5505	.001
	11 Lack information on current condition.	.5214	.003
	24 Felt resentful.	.5019	.004
	25 Felt depressed.	.4699	.007
	1 Aggression.	.4454	
	27 Managing behaviors correctly.	.4450	.010
	17 Unable to express concerns to MHP.	.4424	.010
10. Emergency.	20 Do not know how to explain illness.	.8142	.000
	9 Medication does not work.	.5505	.001
	1 Aggression.	.5241	.003
	27 Managing behaviors correctly.	.5076	.003
	24 Felt resentful.	.4888	.005
	11 Lack information on current condition.	.4838	.005
	26 Lack of control.	.4513	.009

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
11. Lack information on current condition.	18 Unable to ask MHP for assistance.	.7700	.000
	17 Unable to express concerns to MHP.	.7663	.000
	12 Lack information on community resources.	.7567	.000
	16 Put off by MHP.	.7374	.000
	7 Unusual sleeping patterns.	.5885	.001
	8 Refuses appointments.	.5322	.002
	9 Medication does not work.	.5214	.003
	20 Do not know how to explain illness.	.4999	.004
	10 Emergency.	.4838	.005
	21 Demanding behaviors.	.4542	.009
	11 Lack of control.		
12. Lack information on community resources.	11 Lack information on current condition.	.7567	.000
	18 Unable to ask MHP for assistance.	.7521	.000
	17 Unable to express concerns to MHP.	.6911	.000
	16 Put off by MHP.	.6726	.000
	31 Inpatient treatment not available.	.5411	.002
	7 Unusual sleeping patterns.	.5337	.002
13. Cannot leave him/her alone.	22 Unable to pursue own interests.	.6021	.000
	8 Refuses appointments.	.5675	.001
	27 Managing behaviors correctly.	.5135	.003

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	26 Lack of control.	.5117	.003
	30 Unable to plan for unpredictable future.	.5044	.004
	21 Demanding behaviors.	.4917	.005
	6 Inactivity.	.4866	.005
14. Refuses medication.	8 Refuses appointments.	.6471	.000
	7 Unusual sleeping patterns.	.5349	.002
	16 Put off by MHP.	.5250	.002
	6 Inactivity.	.4981	.004
	2 Managed money poorly.	.4958	.004
15. Unable to commit.	31 Inpatient treatment not available.	.6894	.000
	32 Alternative housing not available.	.6599	.000
	8 Refuses appointments.	.6474	.000
	1 Aggression.	.6105	.000
	22 Unable to pursue own interests.	.6078	.000
	28 Change in role responsibility.	.5951	.001
	16 Put off by MHP.	.5250	.001
	30 Unable to plan for unpredictable future.	.5558	.001
	19 Not enough support from family.	.4546	.009

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
16. Put off by MHP.	11 Lack information on current condition.	.7374	.000
	18 Unable to ask MHP for assistance.	.6822	.000
	17 Unable to express concerns to MHP.	.6738	.000
	12 Lack information on community resources.	.6726	.000
	8 Refuses appointments.	.6670	.000
	31 Inpatient treatment not available.	.6181	.000
	15 Unable to commit.	.5943	.001
	14 Refuses medication.	.5250	.002
	7 Unusual sleeping	.4796	.006
	22 Unable to pursue own interests.	.4637	.007
	32 Alternative housing not available.	.4613	.008
17. Unable to express concerns to MHP.	18 Unable to ask MHP for assistance.	.8976	.000
	11 Lack information on current condition.	.7663	.000
	12 Lack information on community resources.	.6911	.000
	16 Put off by MHP.	.6738	.000
	9 Medication does not work.	.4424	.010
18. Unable to ask MHP for assistance.	17 Unable to express concerns to MHP.	.8976	.000
	11 Lack information on current condition.	.7700	.000
	12 Lack information on community resources.	.7521	.000

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	16 Put off by MHP.	.6822	.000
19. Not enough support from family.	24 Felt resentful.	.6182	.000
	21 Demanding behaviors.	.6080	.000
	30 Unable to plan for unpredictable future.	.5323	.002
	22 Unable to pursue own interests.	.5292	.002
	25 Felt depressed.	.5231	.003
	4 Neglects basic needs.	.4690	.007
	15 Unable to commit.	.4546	.009
	28 Change in role responsibility.	.4454	.010
20. Do not know how to explain illness.	10 Emergency.	.8142	.000
	9 Medication does not work.	.7409	.000
	27 Managing behaviors correctly.	.6310	.000
	25 Felt depressed.	.5508	.001
	26 Lack of control.	.5126	.003
	1 Aggression.	.5168	.003
	24 Felt resentful.	.5103	.003
	11 Lack information on current condition.	.4999	.004
	21 Demanding behaviors.	.4736	.006
	23 Felt guilty.	.4638	.007
21. Demanding behaviors.	22 Unable to pursue own interests.	.8022	.000

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	28 Change in role responsibility.	.7384	.000
	30 Unable to plan for unpredictable future.	.7315	.000
	26 Lack of control.	.7270	.000
	27 Managing behaviors correctly.	.7135	.000
	24 Felt resentful.	.6989	.000
	4 neglects basic needs.	.6333	.000
	19 Not enough support from family.	.6080	.000
	1 Aggression.	.6048	.000
	25 Felt depressed.	.5847	.001
	7 Unusual sleeping patterns.	.5134	.003
	13 Cannot leave him/her alone.	.4917	.005
	20 Do not know how to explain illness.	.4736	.006
	11 Lack information on current condition.	.4542	.009
	31 Inpatient treatment not available.	.4468	.010
22. Unable to pursue own interests.	30 Unable to plan for unpredictable future.	.8085	.000
	21 Demanding behaviors.	.8022	.000
	26 Lack of control.	.7395	.000
	27 Managing behaviors correctly.	.6517	.000
	31 Inpatient treatment not available.	.6475	.000
	28 Change in role responsibility.	.6083	.000
	15 Unable to commit.	.6078	.000
	13 Cannot leave him/her alone.	.6021	.000

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	8 Refuses appointments.	.5468	.002
	4 Neglects basic needs.	.5295	.002
	19 Not enough support from family.	.5292	.002
	24 Felt resentful.	.5175	.003
	32 Alternative housing not available.	.4932	.004
	1 Aggression.	.4854	.005
	7 Unusual sleeping patterns.	.4720	.006
	16 Put off by MHP.	.4637	.007
	25 Felt depressed.	.4435	.010
23. Felt guilty.	27 Managing behaviors correctly.	.8495	.000
	24 Felt resentful.	.7442	.000
	25 Felt depressed.	.7147	.000
	26 Lack of control.	.6937	.000
	20 Do not know how to explain illness.	.4638	.007
24. Felt resentful.	27 Managing behaviors correctly.	.8440	.000
	26 Lack of control.	.8044	.000
	25 Felt depressed.	.7487	.000
	23 Felt guilty.	.7442	.000
	21 Demanding behaviors.	.6989	.000
	19 Not enough support from family.	.6182	.000
	30 Unable to plan for unpredictable future.	.5964	.001
	1 Aggression.	.5625	.001
	28 Change in role responsibility.	.5252	.002

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	22 Unable to pursue own interests.	.5175	.003
	20 Do not know how to explain illness.	.5103	.003
	9 Medication does not work.	.5019	.004
	7 Unusual sleeping patterns.	.4909	.005
	10 Emergency.	.4888	.005
	3 Unusual eating patterns.	.4790	.006
	31 Inpatient treatment not available.	.4695	.007
	4 Basic needs.	.4419	.010
25. Felt depressed.	27 Managing behaviors correctly.	.7607	.000
	24 Felt resentful.	.7487	.000
	23 Felt guilty.	.7147	.000
	26 Lack of control.	.6108	.000
	21 Demanding behaviors.	.5847	.001
	20 Do not know how to explain illness.	.5508	.001
	30 Unable to plan for unpredictable future.	.5463	.002
	1 Aggression.	.5409	.002
	19 Not enough support from family.	.5231	.003
	7 Unusual sleeping patterns.	.4814	.006
	9 Medication does not work.	.4699	.007
	5 Left without telling someone.	.4522	.009
	22 Unable to pursue own interests	.4435	.010

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
26. Lack of control.	27 Managing behaviors correctly.	.8658	.000
	24 Felt resentful.	.8044	.000
	30 Unable to plan for unpredictable future.	.7805	.000
	22 Unable to pursue own interests.	.7395	.000
	21 Demanding behaviors.	.7270	.000
	23 Felt guilty.	.6937	.000
	28 Change in role responsibility.	.6380	.000
	31 Inpatient treatment not available.	.6365	.000
	25 Felt depressed.	.6108	.000
	5 Left without telling someone.	.5315	.002
	20 Do not know how to explain illness.	.5126	.003
	13 Cannot leave him/her alone.	.5117	.003
	7 Unusual sleeping patterns.	.4684	.007
	1 Aggression.	.4537	.009
	10 Emergency.	.4513	.009
	11 Lack information on current condition.	.4501	.009
27. Managing behaviors correctly.	26 Lack of control.	.8658	.000
	23 Felt guilty.	.8495	.000
	24 Felt resentful.	.8440	.000
	25 Felt depressed.	.7607	.000
	21 Demanding behaviors.	.7135	.000
	22 Unable to pursue own interests.	.6517	.000
	20 Do not know how to explain illness.	.6310	.000
	30 Unable to plan for unpredictable	.6222	.000

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	future.		
	28 Change in role responsibility.	.5373	.002
	13 Cannot leave him/her alone.	.5135	.003
	10 Emergency.	.5076	.003
	7 Unusual sleeping patterns.	.4962	.004
	1 Aggression.	.4859	.005
	9 Medication does not work.	.4450	.010
28. Change in role responsibility.	21 Demanding behaviors.	.7384	.000
	30 Unable to plan for unpredictable future.	.6865	.000
	26 Lack of control.	.6380	.000
	1 Aggression.	.6119	.000
	22 Unable to pursue own interests.	.6083	.000
	15 Unable to commit.	.5951	.001
	8 Refuses appointments.	.5616	.001
	27 Managing behaviors correctly.	.5373	.002
	4 Neglects basic needs.	.5306	.002
	24 Felt resentful.	.5252	.002
	2 Managed money poorly.	.4776	.006
	29 Lack of financial resources.	.4561	.008
	19 Not enough support from family.	.4454	.010
29. Lack of financial resources.	32 Alternative housing not available.	.5944	.001

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
	1 Aggression.	.4961	.004
	31 Inpatient treat-not available.	.4744	.006
	28 Change in role responsibility.	.4561	.008
30. Unable to plan for unpredictable future.	22 Unable to pursue own interests.	.8085	.000
	26 Lack of control.	.7805	.000
	31 Inpatient treatment not available.	.7611	.000
	21 Demanding behaviors.	.7315	.000
	28 Change in role responsibility.	.6865	.000
	4 Neglects basic needs.	.6538	.000
	1 Aggression.	.6253	.000
	27 Managing behaviors correctly.	.6222	.000
	32 Alternative housing not available.	.6031	.000
	2 Managed money poorly.	.6021	.000
	24 Felt resentful.	.5964	.001
	5 Left without telling someone.	.5950	.001
	15 Unable to commit.	.5558	.001
	25 Felt depressed.	.5463	.002
	7 Unusual sleeping patterns.	.5409	.002
	6 Inactivity.	.5385	.002
	19 Not enough support from family.	.5323	.002
	13 Cannot leave him/her alone.	.5044	.004
	8 Refuses appointments.	.4976	.004

Table 6 (Continued)

Problem # and Statement	Positive Correlation # and Statement	r*	p
31. Inpatient treatment not available.	30 Unable to plan for unpredictable future.	.7611	.000
	15 Unable to commit.	.6894	.000
	32 Alternative housing not available.	.6688	.000
	22 Unable to pursue own interests.	.6475	.000
	26 Lack of control.	.6365	.000
	16 Put off by MHP.	.6181	.000
	1 Aggression.	.5658	.001
	5 Left without telling someone.	.5624	.001
	12 Lack info on community resources.	.5411	.002
	8 Refuses appointments.	.4940	.004
	7 Unusual sleeping patterns.	.4841	.005
	29 Lack of financial resources.	.4744	.006
	24 Felt resentful.	.4695	.007
	21 Demanding behaviors.	.4468	.010
32. Alternative housing not available.	31 Inpatient treatment not available.	.6688	.000
	15 Unable to commit.	.6599	.000
	30 Unable to plan for unpredictable future.	.6031	.000
	29 Lack of financial resources.	.5944	.001
	22 Unable to pursue own interests.	.4932	.004
	16 Put off by MHP.	.4613	.008

Note. *Correlations significant at the $p < .01$ level.

Table 7

Intercorrelation of Problems with Coping Strategies

Using the Combination Score for Problems

Problem # and Statement	Correlation # and Statement	r*	p
1. Aggression	13 Got away. (ER)**	.7941	.000
	14 Argued with family member. (ER)	.7935	.000
	21 Help from friends. (ER)	.7339	.000
	5 Asked for advice. (PS)***	.5824	.001
	10 Kept myself busy. (PS)	.5128	.003
	3 Professional counseling. (PS)	.4977	.004
	9 Waited. (PS)	.4919	.005
2. Managed money poorly.	13 Got away. (ER)	.5097	.003
	3 Professional counseling. (PS)	.4759	.006
	15 Slept. (ER)	.4633	.007
3. Unusual eating	No significant correlations at the $p \leq .01$ level.		
4. Neglects basic needs.	13 Got away. (ER)	.5880	.001
	14 Argued with family member (ER)	.5724	.001
	15 Slept. (ER)	.5013	.004
5. Left without telling someone.	16 Make myself feel better. (ER)	.5630	.001

Table 7 (Continued)

Problem # and Statement	Correlation # and Statement	r*	p
6. Inactivity.	No significant positive correlations at the $p \leq .01$ level.		
7. Unusual sleeping patterns.	14 Argued with family member. (ER)	.5893	.001
	21 Help from friends. (ER)	.5005	.004
8. Refuses appointments.	13 Got away. (ER)	.4778	.006
9. Medication does not work.	14 Argued with family member. (ER)	.4878	.005
10. Emergency.	14 Argued with family member. (ER)	.5483	.002
11. Lack info on current condition.	14 Argued with family member. (ER)	.4937	.004
12. Lack info on community resources.	No significant positive correlations at the $p \leq .01$ level.		

Table 7 (Continued)

Problem # and Statement	Correlation # and Statement	r*	p
13. Cannot leave him/her alone.	No significant positive correlations at the $p \leq .01$ level.		
14. Refuses medication.	No significant positive correlations at the $p \leq .01$ level.		
15. Unable to commit.	13 Got away. (ER)	.6634	.000
	14 Argued with family member. (ER)	.6443	.000
16. Put off by MHP.	No significant positive correlations at the $p \leq .01$ level.		
17. Unable to express concerns to MHP.	No significant correlations at the $p \leq .01$ level.		
18. Unable to ask MHP for assistance.	No significant positive correlations at the $p \leq .01$ level.		
19. Not enough support from family.	14 Argued with family member. (ER)	.7343	.000
	13 Got away. (ER)	.7278	.000
	5 Asked for advice. (PS)	.5906	.001
	16 Make myself feel	.5743	.001

Table 7 (Continued)

Problem # and Statement	Correlation # and Statement	r*	p
	better. (ER)		
	17 Ignored the problem. (ER)	.5742	.001
	3 Professional counseling. (PS)	.5119	.003
	6 One step at a time. (PS)	.5068	.003
	1 Drew on past experience. (PS)	.4846	.005
	15 Slept. (ER)	.4810	.006
20. Do not know how to explain illness.	14 Argued with family member. (ER)	.5627	.001
21. Demanding behaviors.	14 Argued with family member. (ER)	.8287	.000
	10 Kept myself busy. (PS)	.6763	.000
	13 Got away. (ER)	.6646	.000
	17 Ignored the problem. (ER)	.6484	.000
	15 Slept. (ER)	.6035	.000
	16 Make myself feel better. (ER)	.4646	.007
	21 Help from friends. (ER)	.4538	.009
22. Unable to pursue own interests.	14 Argued with family member. (ER)	.7214	.000
	17 Ignored the problem. (ER)	.5986	.000
	16 Make myself feel better. (ER)	.5083	.003

Table 7 (Continued)

Problem # and Statement	Correlation # and Statement	r*	p
23. Felt guilty.	16 Make myself feel better. (ER)	.5283	.002
24. Felt resentful.	14 Argued with family member. (ER)	.7112	.000
	16 Make myself feel better. (ER)	.6274	.000
	3 Professional counseling. (PS)	.5262	.002
	15 Slept. (ER)	.5145	.003
	13 Got away. (ER)	.4802	.006
	10 Kept myself busy. (PS)	.4702	.007
25. Felt depressed.	14 Argued with family member. (ER)	.5862	.001
	16 Make myself feel better. (ER)	.4623	.008
26. Lack of control.	14 Argued with family member. (ER)	.6661	.000
	16 Make myself feel better. (ER)	.6227	.000
	17 Ignored the problem. (ER)	.5062	.004
27. Managing behaviors correctly.	14 Argued with family member. (ER)	.6127	.000

Table 7 (Continued)

Problem # and Statement	Correlation # and Statement	r*	p
28. Change in role responsibility.	13 Got away. (ER)	.6591	.000
	14 Argued with family member. (ER)	.6336	.000
	17 Ignored the problem. (ER)	.6001	.000
	20 Made light of situation. (ER)	.5847	.001
	10 Kept myself busy. (PS)	.4772	.006
29. Lack of financial resources.	No significant positive correlations at the $p \leq .01$ level.		
30. Unable to plan for unpredictable future.	16 Make myself feel better. (ER)	.6796	.000
	14 Argued with family member. (ER)	.6788	.000
	3 Got away. (ER)	.6603	.000
	17 Ignored the problem. (ER)	.5879	.001
	3 Professional counseling. (PS)	.5070	.003
	20 Made light of situation. (ER)	.5232	.003
	15 Slept. (ER)	.4482	.010
31. Inpatient treatment not available.	16 Make myself feel better. (ER)	.6612	.000
	14 Argued with family member. (ER)	.5798	.001
	13 Got away. (ER)	.5751	.001

Table 7 (Continued)

Problem # and Statement	Correlation # and Statement	r*	p
32. Alternative housing not available.	No significant positive correlations at the $p \leq .01$ level.		

Note. *Correlations significant at the $p \leq .01$ level;
**ER = Emotion regulating coping strategy;
***PS = Problem solving coping strategy.

Table 8

Intercorrelation of Coping Strategies

with Coping Strategies

Coping Strategy # and Statement	Correlation # and Statement	r*	p
1. Drew on past experience. (PS)**	7 Use community agencies. (PS)	.6347	.000
	4 Plan of action. (PS)	.5915	.001
	13 Got away. (ER)***	.5109	.003
	8 Other families. (PS)	.4618	.008
	17 Ignored the problem. (ER)	.4584	.008
	21 Help from friends. (ER)	.4561	.008
2. Tried to learn more. (PS)	11 Kept things like before. (PS)	.7051	.000
	12 Let my feelings out. (ER)	.5811	.001
	8 Other families. (PS)	.5351	.002
	4 Plan of action. (PS)	.5188	.003
	7 Use community agencies. (PS)	.4927	.005
	6 One step at a time. (PS)	.4836	.005
	17 Ignored the problem. (ER)	.4694	.007
3. Professional counseling. (PS)	16 Make myself feel better. (ER)	.6407	.000
	8 Other families. (PS)	.6301	.000
	5 Asked for advice. (PS)	.6263	.000
	9 Waited. (PS)	.6017	.000

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
	6 One step at a time. (PS)	.5290	.002
	15 Slept. (ER)	.5124	.003
	13 Got away. (ER)	.4875	.005
	12 Let my feelings out. (ER)	.4575	.008
4. Plan of action. (PS)	7 Use community agencies. (PS)	.7866	.000
	1 Drew on past experience. (PS)	.5915	.001
	8 Other families. (PS)	.5369	.002
	9 Waited. (PS)	.5265	.002
	2 Tried to learn more. (PS)	.5188	.003
	12 Let my feelings out. (ER)	.4715	.007
5. Asked for advice. (PS)	6 One step at a time. (PS)	.8448	.000
	11 Kept things like before. (PS)	.6614	.000
	3 Professional counseling. (PS)	.6263	.000
	8 Other families. (PS)	.5982	.000
	13 Got away. (ER)	.5834	.001
	14 Argued with family member. (ER)	.5705	.001
	12 Let my feelings out. (ER)	.5647	.001
	10 Kept myself busy. (PS)	.5019	.004
	9 Waited. (PS)	.4851	.005
	21 Help from friends. (PS)	.4511	.009

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
6. One step at a time. (PS)	5 Asked for advice. (PS)	.8448	.000
	8 Other families. (PS)	.6835	.000
	12 Let my feelings out. (ER)	.6711	.000
	11 Kept things like before. (PS)	.6701	.000
	9 Waited. (PS)	.6039	.000
	7 Use community agencies. (PS)	.5915	.001
	3 Professional counseling. (PS)	.5290	.002
	2 Tried to learn more. (PS)	.4836	.005
7. Use community agencies. (PS)	4 Plan of action. (PS)	.7866	.000
	8 Other families. (PS)	.7279	.000
	1 Drew on past experience. (PS)	.7279	.000
	9 Waited. (PS)	.6220	.000
	6 One step at a time. (PS)	.5915	.001
	12 Let my feelings out. (ER)	.5545	.001
	2 Tried to learn more. (PS)	.4927	.005
8. Other families. (PS)	7 Use community agencies. (PS)	.7279	.000
	12 Let my feelings out. (ER)	.7002	.000
	6 One step at a time. (PS)	.6835	.000
	9 Waited. (PS)	.6600	.000

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
	3 Professional counseling. (PS)	.6301	.000
	5 Asked for advice. (PS)	.5982	.000
	11 Kept things like before. (PS)	.5845	.001
	4 Plan of action. (PS)	.5369	.002
	2 Tried to learn more. (PS)	.5351	.002
	1 Drew on past experience. (PS)	.4618	.008
	21 Help from friends. (ER)	.4520	.009
9. Waited. (PS)	8 Other families. (PS)	.6600	.000
	7 Use community agencies. (PS)	.6220	.000
	6 One step at a time. (PS)	.6039	.000
	3 Professional counseling. (PS)	.6017	.000
	4 Plan of action. (PS)	.5265	.002
	5 Asked for advice. (PS)	.4851	.005
10. Kept myself busy. (PS)	14 Argued with family member. (ER)	.5751	.001
	13 Got away. (ER)	.5101	.003
	5 Asked for advice. (PS)	.5019	.004
	15 Slept. (ER)	.4834	.005
	11 Kept things like before. (PS)	.4616	.008

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
11. Kept things like before. (PS)	2 Tried to learn more. (PS)	.7051	.000
	6 One step at a time. (PS)	.6701	.000
	5 Asked for advice. (PS)	.6614	.000
	12 Let my feelings out. (ER)	.5933	.001
	8 Other families. (PS)	.5845	.001
	10 Kept myself busy. (PS)	.4616	.008
12. Let my feelings out. (ER)	8 Other families. (PS)	.7002	.000
	6 One step at a time. (PS)	.6711	.000
	2 Tried to learn more. (PS)	.5811	.001
	11 Kept things like before. (PS)	.5933	.001
	5 Asked for advice. (PS)	.5647	.001
	7 Use community agencies. (PS)	.5545	.001
	4 Plan of action. (PS)	.4715	.007
	3 Professional counseling. (PS)	.4764	.008
13. Got away. (ER)	1 Argued with family member. (ER)	.8101	.000
	5 Asked for advice. (PS)	.5834	.001
	17 Ignored the problem. (ER)	.5328	.002
	15 Slept. (ER)	.5228	.003

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
	1 Drew on past experience. (PS)	.5109	.003
	10 Kept myself busy. (PS)	.5101	.003
	3 Professional counseling. (PS)	.4875	.005
	21 Help from friends. (ER)	.4764	.006
14. Argued with family member. (ER)	13 Got away. (ER)	.8101	.000
	10 Kept myself busy. (PS)	.5751	.001
	5 Asked for advice. (PS)	.5705	.001
	21 Help from friends. (ER)	.5531	.001
	15 Slept. (ER)	.4884	.005
	16 Make myself feel better. (ER)	.4839	.005
	17 Ignored the problem. (ER)	.4603	.008
15. Slept. (ER)	16 Make myself feel better. (ER)	.6407	.000
	17 Ignored the problem. (ER)	.5604	.001
	13 Got away. (ER)	.5228	.003
	3 Professional counseling. (PS)	.5124	.003
	14 Argued with family member. (ER)	.4884	.005
	10 Kept myself busy. (PS)	.4834	.005

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
16. Make myself feel better. (ER)	3 Professional counseling. (PS)	.6407	.000
	15 Slept. (ER)	.6407	.000
	17 Ignored the problem. (ER)	.5998	.000
	20 Made light of situation. (ER)	.5033	.004
	14 Argued with family member. (ER)	.4839	.005
17. Ignored the problem. (ER)	16 Make myself feel better. (ER)	.5998	.000
	15 Slept. (ER)	.5604	.001
	13 Got away. (ER0	.5328	.002
	20 Made light of situation. (ER)	.5005	.004
	2 Tried to learn more. (PS)	.4694	.007
	14 Argued with family member. (ER)	.4602	.008
	1 Drew on past experience. (PS)	.4584	.008
18. Things would work out. (ER)	19 Kept my feelings in. (ER)	.6767	.000
19. Kept my feelings in. (ER)	18 Things would work out. (ER)	.6767	.000
20. Made light of situation. (ER)	16 Make myself feel better. (ER)	.5033	.004

Table 8 (Continued)

Coping Strategy # and Statement	Correlation # and Statement	r*	p
	17 Ignored the problem. (ER)	.5005	.004
21. Help from friends. (ER)	14 Argued with family member. (ER)	.5531	.001
	13 Got away. (ER)	.4764	.006
	1 Drew on past experience. (PS)	.4561	.008
	8 Other families. (PS)	.4520	.009
	5 Asked for advice. (PS)	.4511	.009

Note. *Correlations significant at the $p \leq .01$ level; **PS = Problem solving; ***ER = Emotion regulating.

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